Pm-6

marantz®

Model Pm-6

Stereo Pre Main Amplifier

MARANTZ DESIGN AND SERVICE

Using superior design and selected high grade components, MARANTZ Company has created the ultimate in stereo sound. Only original MARANTZ parts can insure that your MARANTZ product will continue to perform to the specifications for which it is famous.

Parts for your MARANTZ stereo are generally available within 72 hours throughout the nation via a toll-free line to our National Parts Depot in California. The sales professionals who take your call immediately refer to their own desk top computer terminal and can quickly determine the availability and price information you require. If for some reason, your order should exceed our available stock, we usually can instantly provide an alternate replacement part or current delivery information. When the order is placed and confirmed, the computer simultaneously generates "hard copy" orders at the distribution center. As hard copies come directly from the computer to the national parts depot, your requested stock is assembled and prepared for shipment and placed on the first available carrier for delivery to you.

ORDERING PARTS

Phone orders will eliminate mail delays, and we encourage the use of this method. If you order by mail, use MARANTZ parts order forms which are available from our National Parts Depot located at the following address:

SUPERSCOPE NATIONAL PARTS DEPARTMENT
20525 Nordhoff Street
Chatsworth, California 91311
Phone: 1-800-423-5108
1-213-998-9333

The following information must be supplied to eliminate delays in processing your order:

1. Complete address.
2. Complete part numbers.
3. Complete description of parts.
4. Model number for which part is required (indicate MARANTZ).
5. Account number (for account customers only).

Direct consumers will be provided with the current retail prive quotation on available parts in order to advise them of the cost of the parts and shipping.

OVERSEAS PARTS ORDERING

Parts may also be ordered from the following overseas addresses:

CANADA

Superscope Canada, Ltd.
3710 Nashua Drive
Mississauga
Ontario, Canada L4V1M5

AUSTRALIA

Superscope (Australasia) Pty., Ltd.
32 Cross Street (P.O. Box 604)
Brookvale 2100 N.S.W.
Australia

JAPAN

Marantz Japan, Inc.
3622 Kamitsuruma
Sagamihara Shi
Kanagawa, Japan

EUROPE

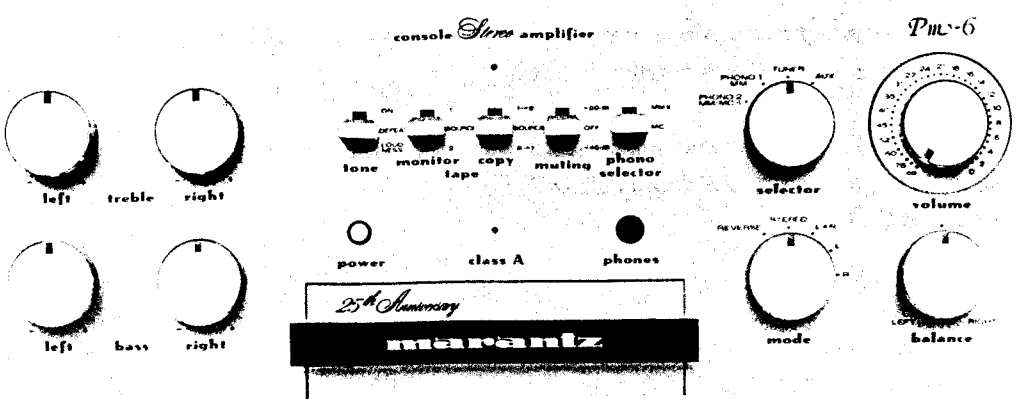
Marantz Europe, S.A.
Avenue Leopold III, 2
7120 Peronnes-Lez-Binche
Belgium

Marantz France
Rue Louis Armand 9
92600 Asnieres
Hauts-de-Seine
France

Marantz Audio U.K. Ltd.
London Road, 203
Staines
Middlesex
England

Marantz GmbH
Max-Planck-Strasse 22
D-6072 Dreieich 1
West Germany

All of the above locations are fully equipped to take care of your total service needs. Because various countries have differing configuration requirements, it is necessary that you contact the service facility in your particular country. In the event that there is no service location listed for your country, please contact the nearest facility for the necessary assistance.



特　長

■MCヘッドアンプ(13石構成)

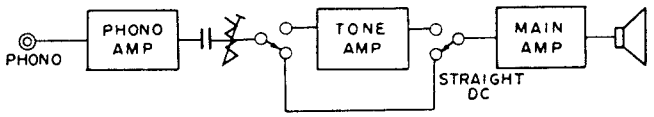
初段はNPN超ローノイズトランジスタ4本を並列に組合せたものとPNP超ローノイズトランジスタ4本を組合せたものとでプッシュプル構成とし、さらに2段目の増巾段もプッシュプル構成とし出力段は十分に電流を流したSEPP構成の片チャンネル当り13石ものトランジスタを使用した本格的なMCヘッドアンプです。
特にS／N比を改善するためフィードバック回路のインピーダンスを徹底的に小さくしています。定格入力125μVで電圧利得は20倍（26dB）となっています。

■PHONOアンプ(11石構成)

このPHONOアンプはTIM歪の低減と高S/Nを実現するためにマランツ独特の11石構成の完全全段プッシュプル回路としています。
初段はNチャンネル、Pチャンネルの超ローノイズ、ハイGmのFETをプッシュプルに組合せ、さらにカスコードカレントミラー回路を使用し入力段のインピーダンス変化による特性悪化を防止しています。
次段は段間エミッターフォロアーによるバッファアンプを通り2段目プッシュプル電圧増巾段に入ります。
さらに出力段はどのような負荷でも十分にドライブすることの出来るSEPP回路としS/N比改善のためイコライザ素子のインピーダンスも従来のものに比べ十分低くし、定格入力時のS/Nも90dBを達成しています。
またイコライザ素子には誤差1%以内の金属被膜抵抗と2%以内のポリプロピレンコンデンサを使用し20Hz～20kHz 以内でのRIAA偏差を0.2dB以内に抑えています。
なおPHONO 1のポジションではカートリッジの最適負荷を選ぶためカートリッジロードを27kΩ、47kΩ、100kΩに切換えることができます。
さらに電源ON－OFF時の不快なノイズを取り除くためにフォノアンプ出力にミューティングリレーを挿入し万全を期しています。
さらにターンテーブルのゴロやフラッターを取り除くために出力部にEQ Subsonicフィルターを入れています。

■STRAIGHT DC(OPERATIONスイッチ)

PHONOアンプの出力を直接メインアンプに送り込むことによって段間のカップリングコンデンサを1つだけにすることが出来ます。



このスイッチを操作することによってSTRAIGHT DC-TONE IN-TONE OUTの動作状態を選ぶことが出来ます。なお各動作でのゲイン及び入力感度の変化はありません。

■メインアンプ

STRAIGHT DC動作をさせるため入力感度は150mVで出力120W（8Ω、ABクラス）を得られるゲインを持っています。
完全DCアンプとしてマランツ独特の回路方式としTIM歪の低減とDCサーボ回路によりDCドリフトの低減に万全を期しています。

電圧増巾段(Voltage Amp)

入力段はペアー特性の良いデュアルFETによるソースフォロアーアンプを使用し入力段のインピーダンス変化による特性悪化を防いでいます。インピーダンスを下げた信号はデュ

アルトランジスタによる差動アンプで増巾されますが、この負荷にはやはりデュアルトランジスタを使った能動バランス負荷回路を使用しています。
差動出力の片側は位相反転し、それぞれの差動出力は段間エミッタフォロアーによるバッファーアンプを通し2段目のプッシュプル増巾段に入ります。

電力増巾段(Power output)
電力増巾段には新開発のスーパーハイfT（70～90MHz）のパワートランジスタを並列接続した3段ダーリントン方式の出力段でバイアス電流及び出力供給電圧を切換えることにより純Aクラス30W（8Ω）とABクラス120W（8Ω）を切り換えることが出来ます。

⊠調整方法

●バイアス電流調整

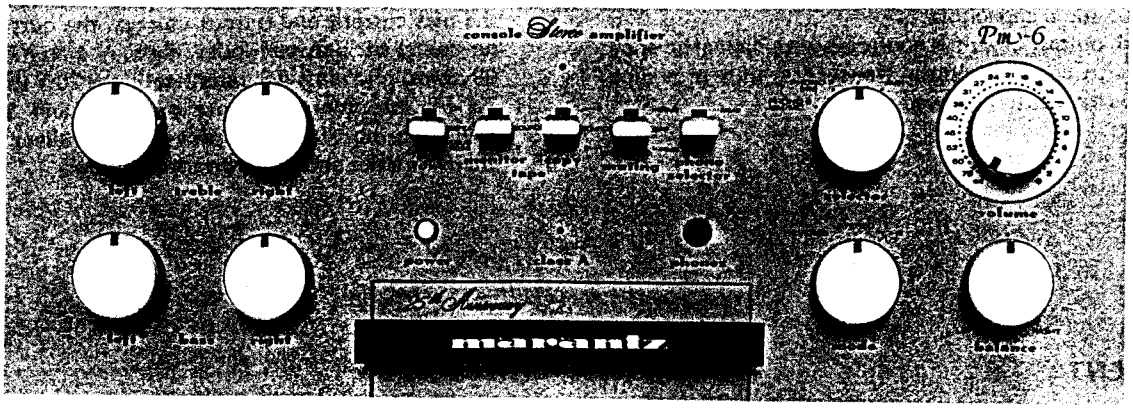
(1)CLASS B （フロントパネル、ポケットカバー内のCLASSⒶのスイッチをOFFにする）
調整個所　RH07、RH08（1kΩ）
入　力　————
出　力　8Ω（LOAD）
測定個所　Lch TP1～TP2間、Rch TP4～TP5間にデジタルボルトメーターを接続し端子電圧が安定する（約30秒～1分）まで待ち、その後14mVになるようRH07、RH08を調整します。

(2)CLASS A （フロントパネルポケットカバー内のCLASSⒶのスイッチをONにする）
調整個所　RH05、RH06 4.7kΩ
入　力　————
出　力　8Ω（LOAD）
測定個所　Lch TP1～TP2間、Rch TP4～TP5間にデジタル、ボルトメーターを接続し端子電圧が安定する（約30秒～1分）まで待ち、その後380mVになるようRH05、RH06を調整します。

⊠サービスに必要な測定器

項　目	使　用　法
歪　率　計	アンプ出力の歪と電圧を測定する。
低周波発振器	正弦波および矩形波の信号源として使用する。
オッシロスコープ	波形分析およびトラブル・シューティングに使用する。
VTVM	電圧および抵抗値の測定に使用する。
交流ワット・メーター	アンプの一次側消費電力をモニターする。
電源電圧計	アンプの一次側電源電圧をモニターする。
スライダック（0～140VAC, 10A）	アンプの一次側電圧を調節する。
ショート用プラグ	雑音を拾わないようにアンプ入力を短絡するのに使用する。
出力負荷抵抗（8Ω±0.5%, 250W）	アンプの出力に8Ωの負荷を与える。
出力負荷抵抗（4Ω±0.5%, 250W）	アンプの出力に4Ωの負荷を与える。

MARANTZ MODEL Pm-6 STEREO PRE MAIN AMPLIFIER

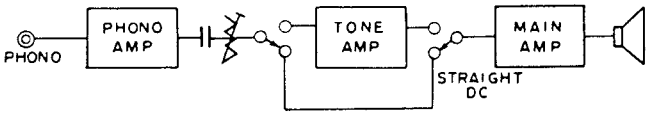


FEATURES

- **MC HEAD amplifier**
  The first stage uses 4 super-low noise NPN transistors and 4 super-low noise PNP transistors connected in parallel to form a push-pull circuit. The second stage is also a push-pull circuit. The output stage is a high gain SEPP amplifier. Totally, 13 transistors are used for a channel. The feedback circuit has very low impedance, thus improving the S/N. With this design, this MC head amplifier provides a high voltage gain (20 dB or 10 times) at a rated input of 220 μV.

- **PHONO amplifier**
  The PHONO amplifier is a unique Marantz full-stage push-pull circuit using 11 transistors that ensures low TIM distortion and a high S/N.
  The first stage uses super-low noise, high Gm FETs in push-pull connection (N and P channels) and a cascode current mirror circuit to prevent the deterioration of the characteristics due to changes in input impedance. The PHONO signal is fed through the emitter follower buffer amplifier to the push-pull voltage amplifier in the second stage.
  The output stage is an SEPP circuit which has sufficient driving ability. The equalizer circuit has a very low impedance so that the S/N is a high 90 dB at the rated input. This circuit uses high quality metallic film resistors (±1%) and polypropylene capacitors (±2%) to reduce the deviation from the RIAA characteristic to less 0.2 dB at 20 Hz – 20 kHz.
  Optimum cartridge load can be selected between 27 kΩ, 47 kΩ and 100 kΩ by using the PHONO switch on the front panel. The output stage includes a muting relay to eliminate the shock noise which is normally generated when the power is turned on and off.
  The output stage is also provided with an EQ subsonic filter to eliminate wow and flutter generated by the turntable.

- **Straight DC (Operation switch)**
  By using this switch, the output of the PHONO amplifier, passing through the coupling capacitor, is directly fed to the main amplifier without affecting the gain and input sensitivity, thus the main amplifier operates in the STRAIGHT DC/TONE-IN/TONE-OUT mode.



- **Main amplifier**
  The main amplifier has sufficient gain to provide 120W (class AB, 8 ohms) of output power at 150 mV input to ensure satisfactory STRAIGHT DC operation. This full-stage DC amplifier employs a unique Marantz circuit design to minimize TIM distortion and a DC servo circuit to eliminate DC drift.

  Voltage amplifier stage
  The input stage uses a matched pair of dual FETs as a source follower amplifier to prevent the deterioration of the characteristics due to changes in input impedance. The low impedance signal is amplified by the dual transistor differential amplifier with an active load balancing circuit. The differential output is fed through the emitter follower buffer amplifier to the push-pull amplifier in the next stage.

- PLUS

The speaker protection circuit uses high performance ICs and relays. The power supply circuit is complete with a large, high regulation transformer and large capacity electrolytic audio capacitors.
The power output circuit is equipped with high efficiency heat sinks to cool the power transistors, thus providing continuous high output power.

Power amplifier stage

The power amplifier stage uses newly developed super-high f_T (70 ~ 90 MHz) power transistors connected in parallel to form a 3-stage Darlington circuit. By selecting the bias current and output voltage, the output stage can be switched between pure class A amplification, 30W 98 ohms) and class AB amplification, 120W (8 ohms).
To use of unique Marantz push-pull and 2-pole phase compensating circuits provides excellent open-loop characteristics and distortion-free output.

ADJUSTMENT

- **Bias current adjustment**

1. Class B (Set the front panel CLASS A button to the OFF position.)
   Adjustment: RH07 and RH08 (1 kΩ)
   Input:
   Output: 8-ohm load
   Procedure: Connect a digital voltmeter across TP1 and TP2 (L ch.) and across TP4 and TP5 (R ch.). After the terminal voltages stabilize (30 ~ 60 seconds later), adjust RH07 and RH08 until the voltmeter reads 14 mV for each channel.

2. Class A (Press the front panel CLASS A button to the ON position.)
   Adjustments: RH05 and RH06 (4.7 kΩ)
   Input:
   Output: 8-ohm load
   Procedure: Connect a digital voltmeter across TP1 and TP2 (L ch.) and across TP4 and TP5 (R ch.). After the terminal voltages stabilize (30 ~ 60 seconds later), adjust RH05 and RH06 until the voltmeter reads 380 mV for each channel.

REQUIRED MEASURING INSTRUMENTS

Table 1. List of required measuring instruments

Item	Purpose
Distortion meter	Measures distortion in amplifier output and its voltage.
Audio frequency generator	Signal source for audio-frequency sine and square waves.
Oscilloscope	Waveform analysis and troubleshooting.
V T V M	Voltage and resistance measurement.
AC power meter	Monitors amplifier's primary power consumption.
Voltmeter	Monitors amplifier's primary supply voltage.
Slidac (0 ~ 140V AC, 10A)	Adjusts amplifier's primary supply voltage.
Shorting plug	Used to short input jacks for noise prevention.
Output load resistor (8Ω ± 0.5%, 250W)	Load to amplifier output (8Ω).
Output load resistor (4Ω ± 0.5%, 250W)	Load to amplifier output (4Ω).

Model Pm-6 (F)				Model Pm-6 (E)			
REF. DESIG.	Q'TY	PART NO.	DESCRIPTION	REF. DESIG.	Q'TY	PART NO.	DESCRIPTION
				PE01	1	WK21441820	P.W. Board, Tone Amp (R)
					1	ZZ21441820	P.W. Board Assembly
				PF00	1	WK21441850	P.W. Board, Loudness
					1	ZZ21441850	P.W. Board Assembly
				PG00	1	WH21441310	P.W. Board, Mode Balance
					1	ZZ21441310	P.W. Board Assembly
				PH00	1	WK21441520	P.W. Board, Filter SW
					1	ZZ21441520	P.W. Board Assembly

TECHNICAL SPECIFICATIONS

AUDIO SECTION

Rated Power Output (20 Hz to 20 kHz, both channels driven)	120W x 2 (8Ω Load) Class AB
	30W x 2 (4Ω Load) Class A
Power Bandwidth (8Ω Load, THD 0.05%)	5 Hz to 100 kHz
THD (20 Hz to 20 kHz, 8Ω Load)	0.015%
I.M. Distortion	0.015%
Frequency Response (20 Hz to 20 kHz)	+0, −0.2 dB
(+0, −1 dB)	5 Hz to 100 kHz
Damping Factor (8Ω Load)	100
Input Sensitivity and Impedance (at MAIN IN)	1.5V/30 kΩ
Phono 1 (MM)	2.5 mV/27 kΩ/47 kΩ/100 kΩ
Phono 1 (MC)	125 μV/75Ω
Phono 2 (MM)	2.5 mV/47 kΩ
High Level	150 mV/40 kΩ
Rated Power Output and Impedance	
Pre Out	1.5V/220Ω
Tape Out	150 mV/600Ω
Frequency Response, RIAA 20 Hz to 20 kHz	±0.2 dB
Equivalent Input Noise (Phono, IHF-A)	0.24 μV
Dynamic Range (Phono)	120 dB
Signal-to-Noise Ratio (IHF-A Network)	
Phono (MM	86 dB
Phono (MC)	68 dB
TAPE/TUNER/AUX	110 dB
Phono MAX Input Voltage, 1 kHz	
Phono (MM)	220 mV
Phono (MC)	10 mV
Tone Control Response	
Bass Range 100 Hz	±8 dB
TREBLE Range 10 kHz	±8 dB

GENERAL

Power Requirements	110/120/220/240V AC, 50 /60 Hz
Power Consumption	350W
Dimensions	
Panel Width	16-3/8" (416 mm)
Panel Height	5-3/4" (146 mm)
Depth	13-1/16" (332 mm)
Weight	
Unit alone	34 lbs 1 oz (15.5 kg)

Model Pm-6 (F)				Model Pm-6 (E)			
REF. DESIG.	Q'TY	PART NO.	DESCRIPTION	REF. DESIG.	Q'TY	PART NO.	DESCRIPTION
005D	1	2144861010	Label	005D	1	201H861010	Label
				007D	1	59030805P1	Label
001E	1	2144160210	Bracket, Rear Panel	001E	1	2144160220	Bracket, Rear Panel
005E	1	1455259090	Bushing	005E	1	1455259040	Bushing
				016E	1	201H053030	Cover
				017E	2	51280308U0	B.H. Tapped Screw B3 x 8
				018E	2	51280308U0	B.H. Tapped Screw B3 x 8
				901F	1	62030039W0	Lug
				902F	1	5128030880	B.H. Tapped Screw B3 x 8
001S	1	2144801010	Packing Case	001S	1	2144801020	Packing Case
005S	1	2864804010	Sleeve				
007S	1	2144851110	Instructions	007S	1	2144851310	Instructions
010S	1	9631000110	Guarantee Card				
012S	2	9526019040	Serial No. Card	012S	2	9526019060	Serial No. Card
013S	1	2976813020	Envelope				
014S	1	2976851040	Instructions				
018S	1	9650000030	S. Station Card				
023S	1	2461107010	Sheet				
				024S	1	2147863010	Hang Tag
				030S	1	2731821010	Silicagel
				031S	1	2144856010	Circuit Diagram
				032S	1	2144851020	Instructions
				001R	1	2932861010	Label
				003R	1	2578861010	Label
				005R	1	2882861020	Label
				901R	1	2461861030	Label
				902R	1	2461861030	Label
				903R	1	2461861020	Label
GU01	1	BF10400030	Cap. Comp. 0.1μF + 120Ω	GU01	1	BF10400060	Cap. Comp. 0.1μF + 120Ω
				J091	1	BY05080010	Voltage Selector
L001	1	TS60508010	Power Transformer	L001	1	TS60508040	Power Transformer
PN00	1	YH22870210	P.W. Board, ASO Protector				
W001	1	YC02400180	A.C. Power Cord	W001	1	YC01900030	A.C. Power Cord
015F	1	2144123010	Contactor	015F	1	2144123070	Contactor
016F	1	2144123020	Contactor				
017F	1	2144123030	Contactor				
019F	3	51100308E0	B.H.B. Screw B3 x 8				
				006F	2	201H120010	Insulator
007L	1	2144259020	Bushing for Power Transistor				
044L	1	51280306U0	B.H. Tapped Screw B3 x 6				
				045L	2	62051870W0	Lug
CH01	1	EA10603590	Elect 10μF 35V	CH01	1	EQ10602510	Elect 10μF 25V
CH02	1	EA10603590	Elect 10μF 35V	CH02	1	EQ10602510	Elect 10μF 25V
RH03	1	GD05471140	470Ω	RH03	1	GD05271140	270Ω
RH04	1	GD05471140	470Ω	RH04	1	GD05271140	270Ω
C703	1	DF76470550	Film 47pF ±10%	C703	1	DF76680550	Film 68pF
C704	1	DF76470550	Film 47pF ±10%	C704	1	DF76680550	Film 68pF
C711	1	DF16474510	Film 0.47μF ±10%	C711	1	DF16105510	Film 1μF
C712	1	DF16474510	Film 0.47μF ±10%	C712	1	DF16105510	Film 1μF
C773	1	EA47601630	Elect 47μF 16V				
C775	1	EA10710010	Elect 100μF 100V	C775	1	EA22708020	Elect 220μF 80V
C776	1	EA10710010	Elect 100μF 100V	C776	1	EA22708020	Elect 220μF 80V

Model Pm-6 (F)

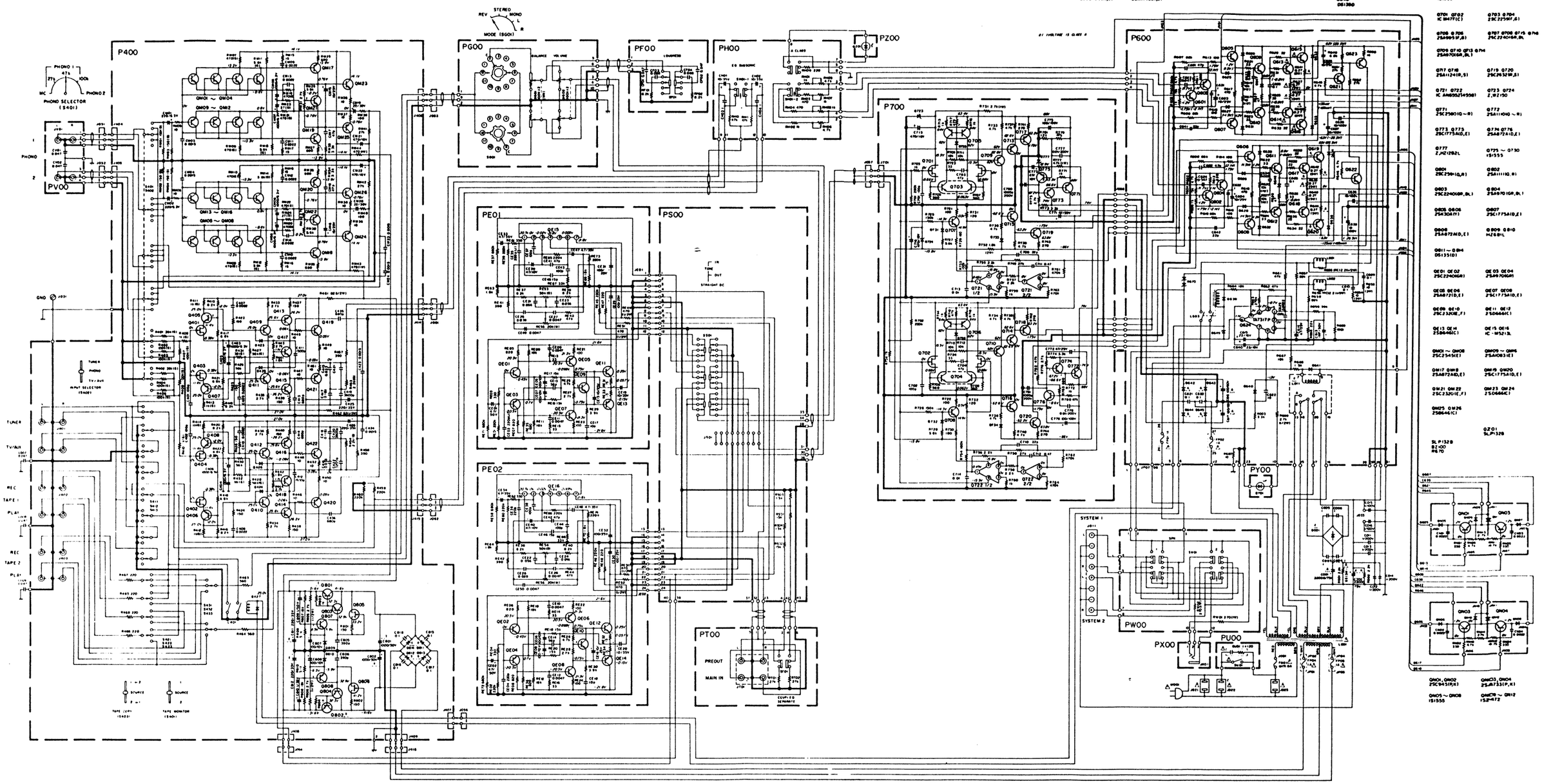
REF. DESIG.	Q'TY	PART NO.	DESCRIPTION
R723	1	GD05330140	33Ω 1/4W
R724	1	GD05330140	33Ω 1/4W
R761	1	GD05474140	470KΩ 1/4W
R762	1	GD05474140	470KΩ 1/4W
R763	1	GD05474140	470KΩ 1/4W
R764	1	GD05474140	470KΩ 1/4W
C603	1	EA10602530	Elect 10μF 25V
C604	1	EA10602530	Elect 10μF 25V
C616	1	EA22708020	Elect 220μF 80V
C617	1	EA22708020	Elect 220μF 80V
C631	1	DF16105510	Film 1μF ±10%
C632	1	DF16105510	Film 1μF ±10%
C640	1	EA22601630	Elect 22μF 16V
C641	1	DF76220500	Film 220pF ±10%
C642	1	DF76220500	Film 22pF ±10%
Q613	1	HT327062A0	Transistor 2SC2706 (R or O)
Q614	1	HT111462A0	Transistor 2SA1146 (R or O)
Q615	1	HT327062A0	Transistor 2SC2706 (R or O)
Q616	1	HT111462A0	Transistor 2SA1146 (R or O)
Q617	1	HT327062A0	Transistor 2SC2706 (R or O)
Q618	1	HT111462A0	Transistor 2SA1146 (R or O)
Q619	1	HT327062A0	Transistor 2SC2706 (R or O)
Q620	1	HT111462A0	Transistor 2SA1146 (R or O)
CM19	1	EA22603590	Elect 22μF 35V
CM20	1	EA22603590	Elect 22μF 35V
R809	1	GD05512140	5.1KΩ 1/4W
R810	1	GD05512140	5.1KΩ 1/4W
CE19	1	EA10603530	Elect 10μF 35V
CE20	1	EA10603530	Elect 10μF 35V
RE49	1	GD05471120	470Ω 1/2W
RE50	1	GD05471120	470Ω 1/2W
RE51	1	GD05471120	470Ω 1/2W
RE52	1	GD05471120	470Ω 1/2W
JX01	1	YJ01001340	Jack, Head Phone

Model Pm-6 (E)

REF. DESIG.	Q'TY	PART NO.	DESCRIPTION
R723	1	GD05331140	330Ω 1/4W
R724	1	GD05331140	330Ω 1/4W
R761	1	GD05334140	330KΩ 1/4W
R762	1	GD05334140	330KΩ 1/4W
R763	1	GD05334140	330KΩ 1/4W
R764	1	GD05334140	330KΩ 1/4W
C603	1	EA10703540	Elect 100μF 35V
C604	1	EA10703540	Elect 100μF 35V
C616	1	EA22708050	Elect 100μF 80V
C617	1	EA22708050	Elect 100μF 80V
C618	1	EA22708020	Elect 220μF 80V
C619	1	EA22708020	Elect 220μF 80V
C641	1	DF76220550	Film 22pF
C642	1	DF76220550	Film 22pF
Q613	1	HT328372A0	Transistor 2SC2837 (R or O)
Q614	1	HT111862A0	Transistor 2SA1186 (R or O)
Q615	1	HT328372A0	Transistor 2SC2837 (R or O)
Q616	1	HT111862A0	Transistor 2SA1186 (R or O)
Q617	1	HT328372A0	Transistor 2SC2837 (R or O)
Q618	1	HT111862A0	Transistor 2SA1186 (R or O)
Q619	1	HT328372A0	Transistor 2SC2837 (R or O)
Q620	1	HT111862A0	Transistor 2SA1186 (R or O)
CM19	1	EQ22602520	Elect 22μF 25V
CM20	1	EQ22602520	Elect 22μF 25V
R809	1	GM21448710	4.87KΩ 1/4W
R810	1	GM21448710	4.87KΩ 1/4W
CE19	1	EQ10602510	Elect 10μF 25V
CE20	1	EQ10602510	Elect 10μF 25V
RE49	1	GG05471120	470Ω 1/2W
RE50	1	GG05471120	470Ω 1/2W
RE51	1	GG05471120	470Ω 1/2W
RE52	1	GG05471120	470Ω 1/2W
C010	1	DF16103350	Film Cap. 0.01μF 50V
JX01	1	YJ01001400	Jack, Head Phone
J063	1	YB00250070	Connective Cord
J064	1	YB00250080	Connective Cord
J065	1	YB00250090	Connective Cord
006L	1	201H120010	Insulator
P400	1	WK21441510	P.W. Board, Pre Amp
	1	ZZ21441510	P.W. Board Assembly
P401	1	WH21441330	P.W. Board, MM TR
	1	ZZ21441330	P.W. Board Assembly
P600	1	WK21441210	P.W. Board, Output Amp
	1	ZZ21441210	P.W. Board Assembly
P700	1	WK21441220	P.W. Board, Voltage
	1	ZZ21441220	P.W. Board Assembly
PE01	1	WK21441810	P.W. Board, Tone Amp (L)
	1	ZZ21441810	P.W. Board Assembly

◇回路図

Model PM-6

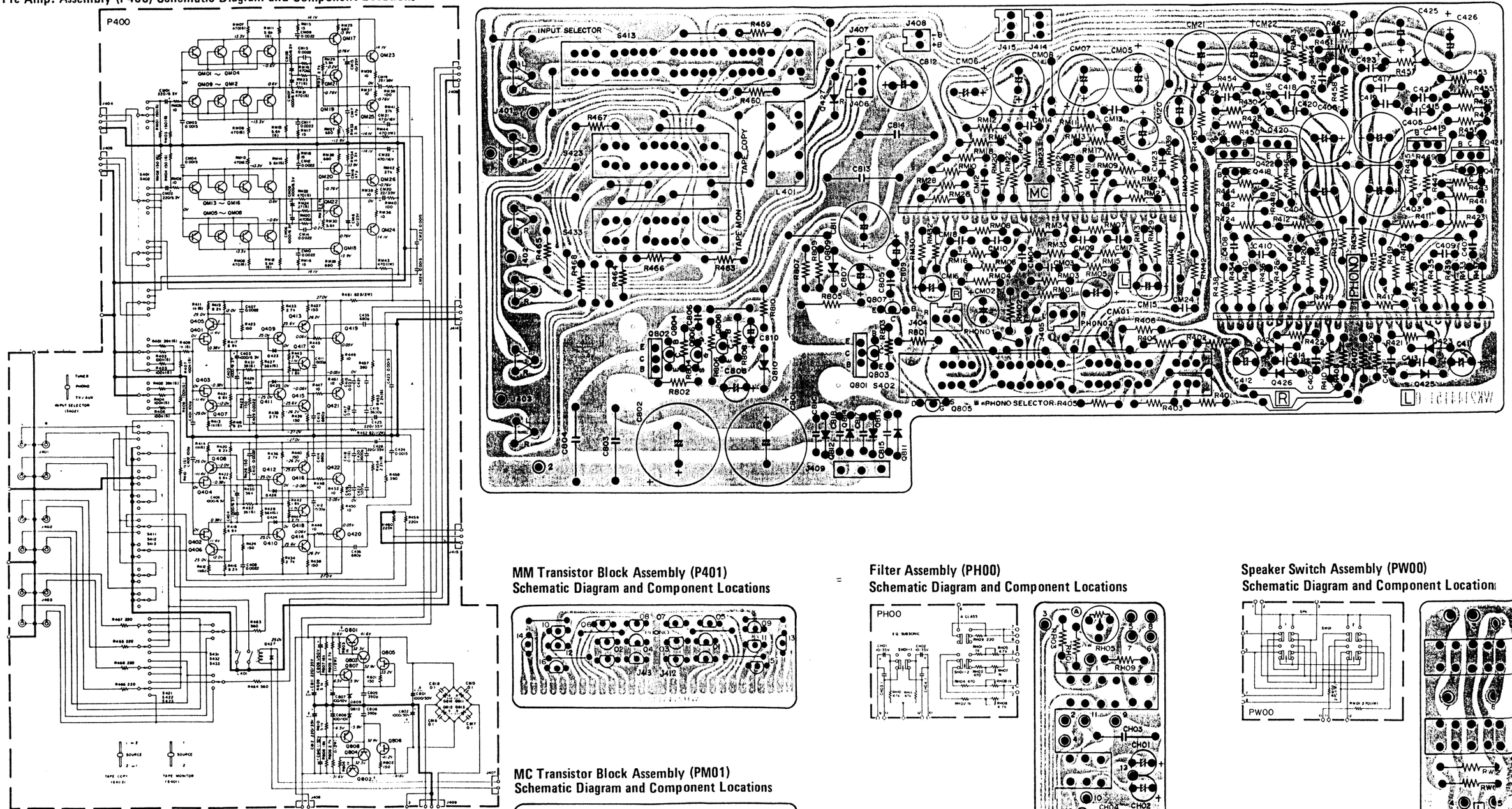


（安全上の注意：⚠が付いている部品は，安全上重要な部品です。必ず指定されている部品番号の部品を使用してください。）

本機の回路は改良のため予告なく変更することがありますが、ご了承ください。

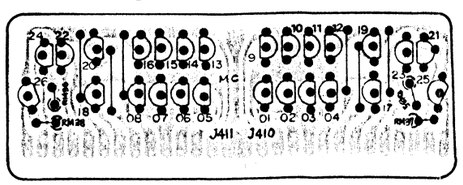
◇回路図と基板

Pre Amp. Assembly (P400) Schematic Diagram and Component Locations

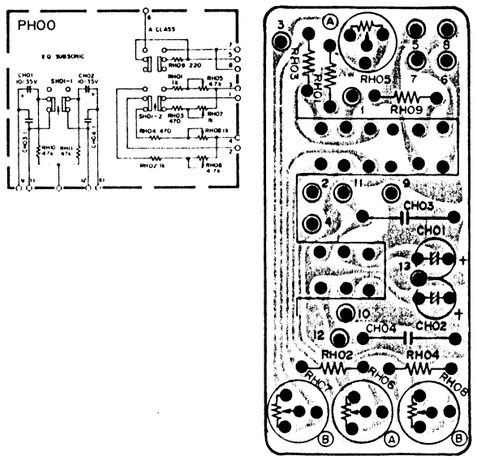


MM Transistor Block Assembly (P401)
Schematic Diagram and Component Locations

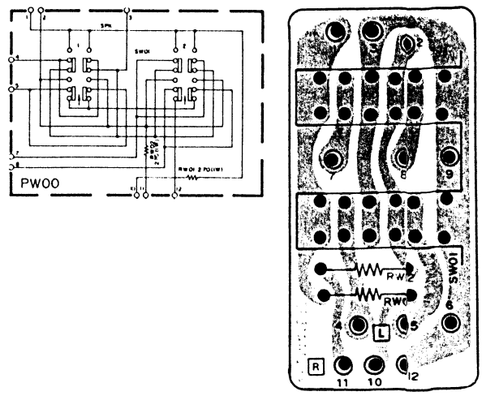
MC Transistor Block Assembly (PM01)
Schematic Diagram and Component Locations



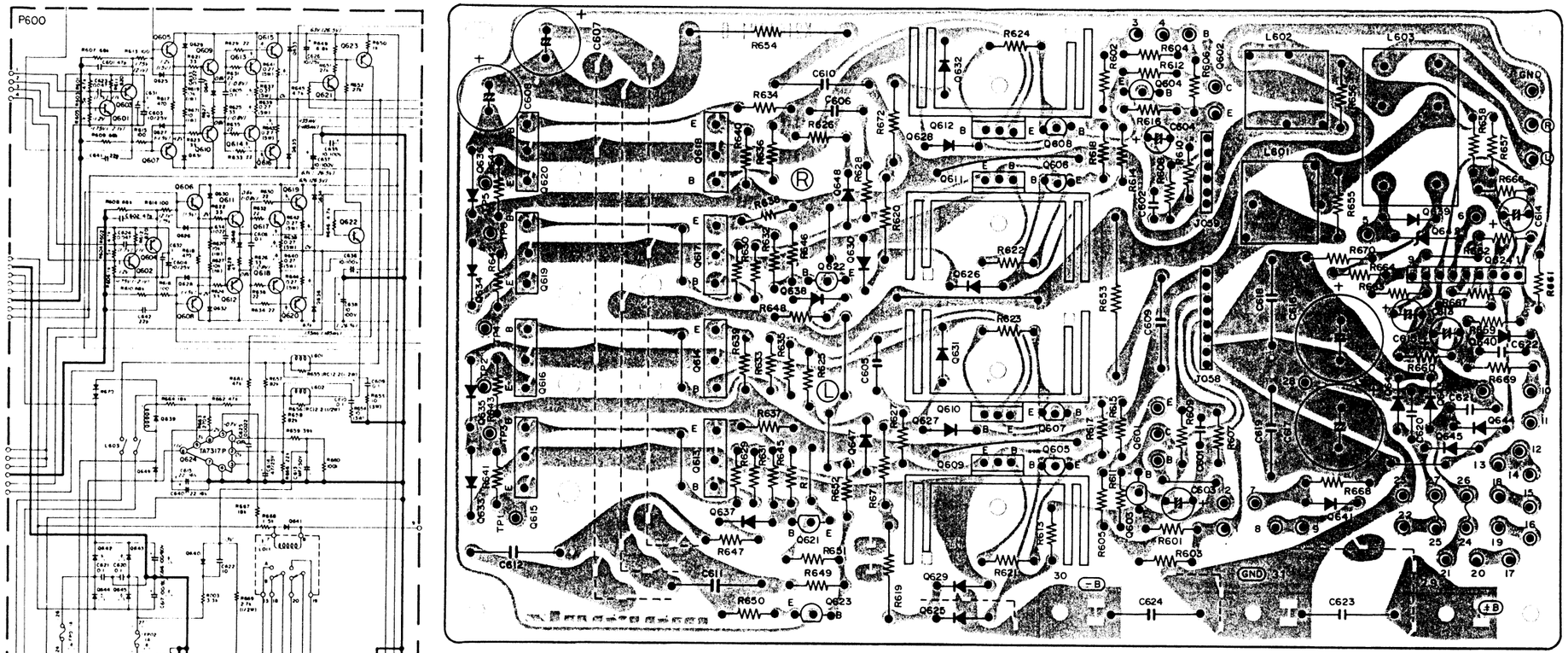
Filter Assembly (PH00)
Schematic Diagram and Component Locations



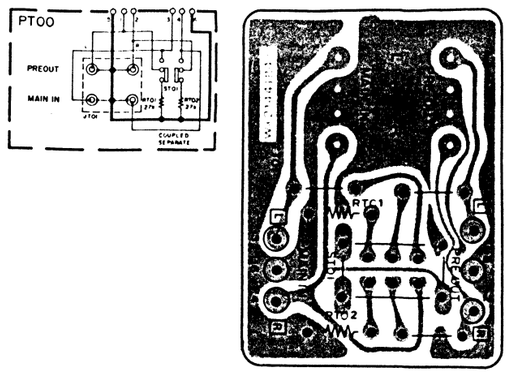
Speaker Switch Assembly (PW00)
Schematic Diagram and Component Location



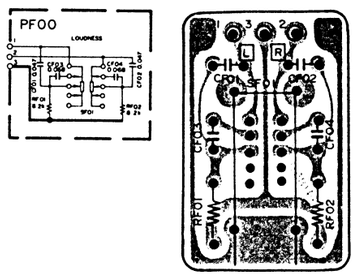
Output Amp. Assembly (P600) Schematic Diagram and Component Locations



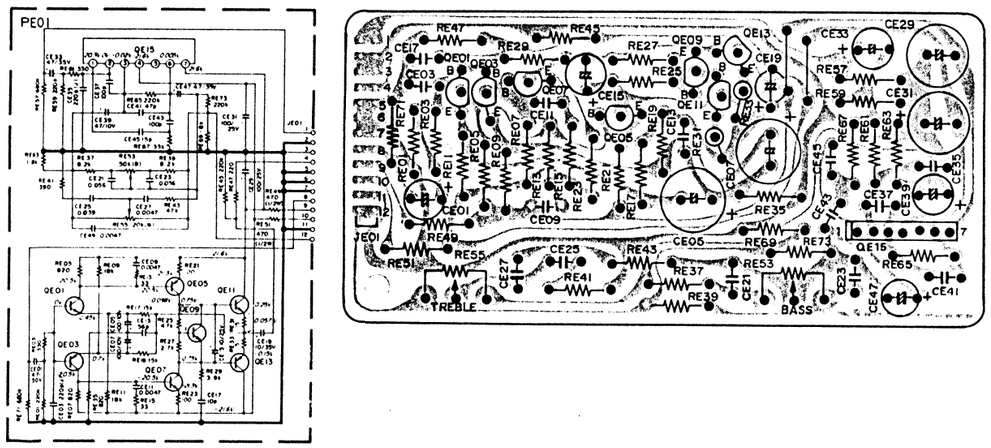
Pre Out Assembly (PT00)
Schematic Diagram and Component Locations



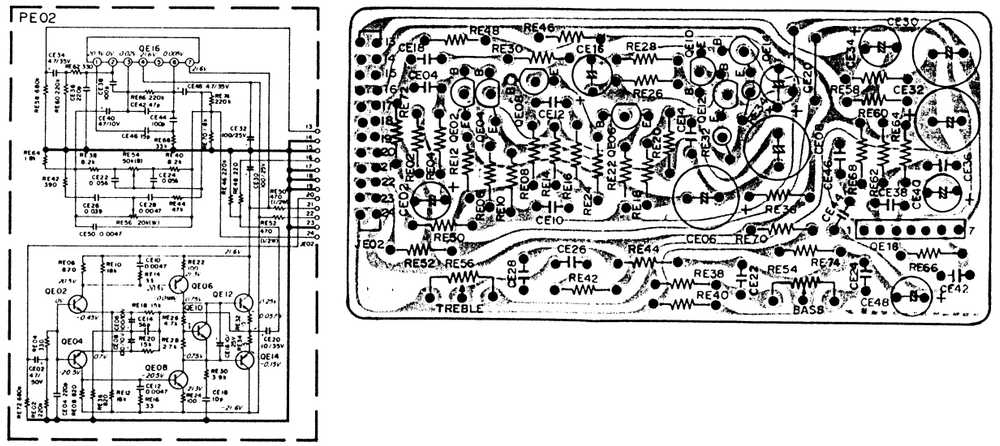
Loudness Assembly (PF00)
Schematic Diagram and Component Locations



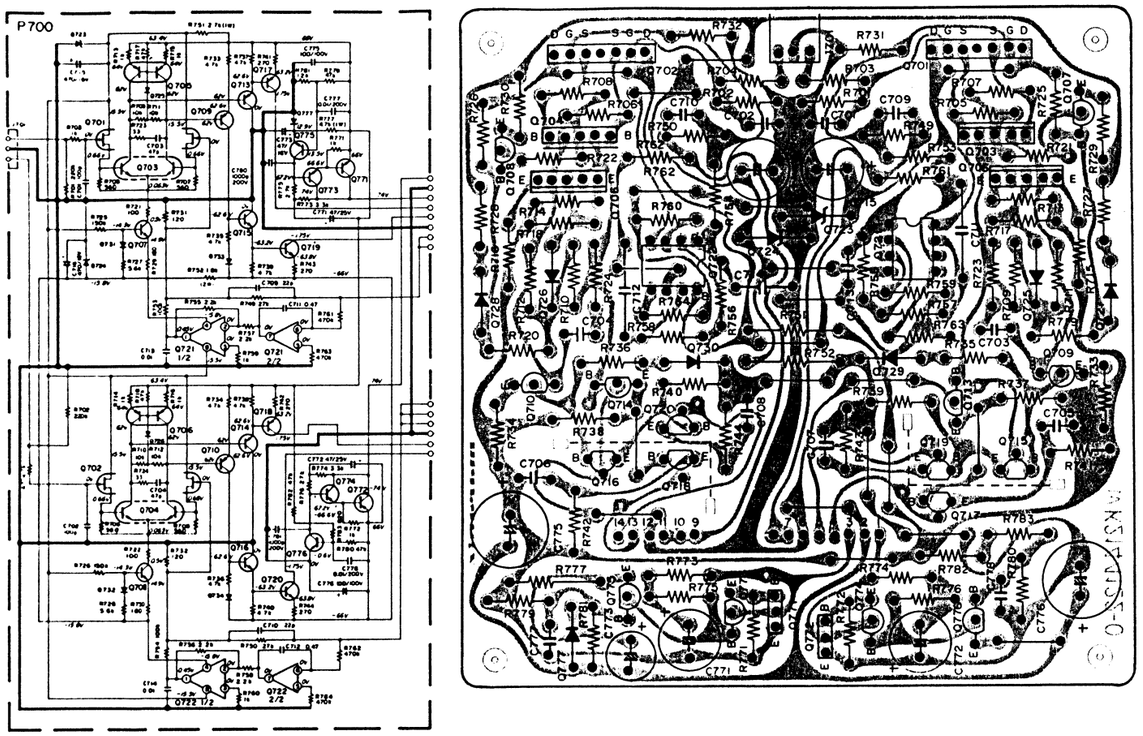
Tone Amp. (L ch) Assembly (PE01) Schematic Diagram and Component Locations



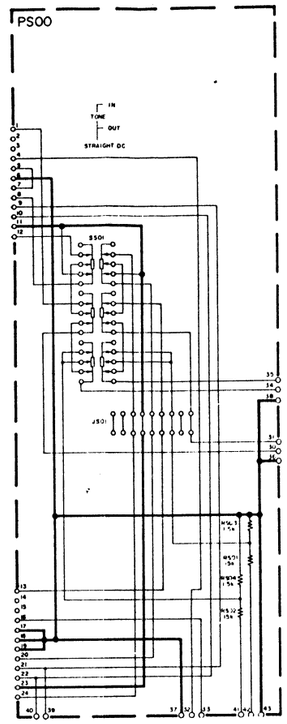
Tone Amp. (R ch) Assembly (PE02) Schematic Diagram and Component Locations

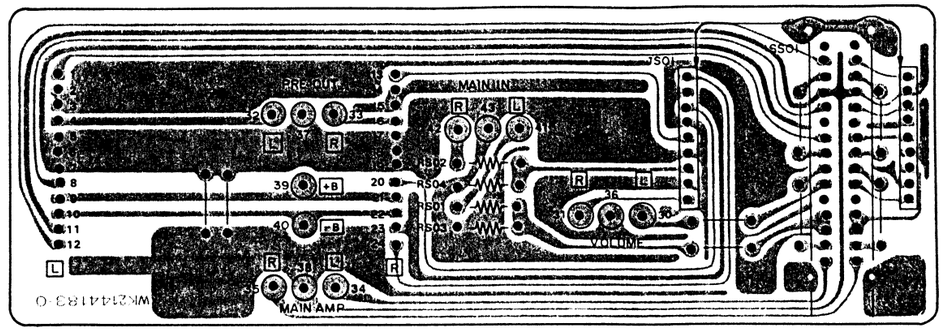


Voltage Amp. Assembly (P700) Schematic Diagram and Component Locations

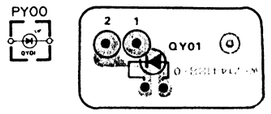


Straight DC Assembly (PS00) Schematic Diagram and Component Locations

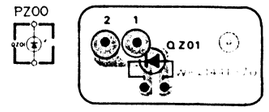




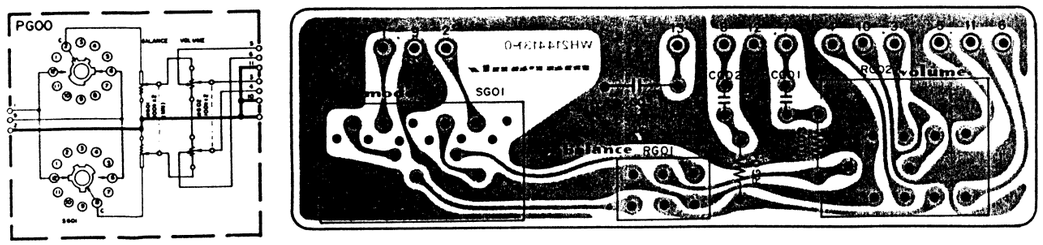
L.E.D. Power Ind. Assembly (PY00) Schematic Diagram and Component Locations



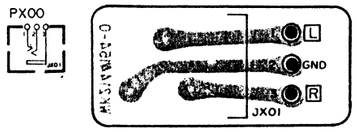
L.E.D. Class A Ind. Assembly (PZ00) Schematic Diagram and Component Locations



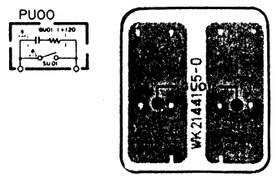
Balance Control Assembly (PG00) Schematic Diagram and Component Locations



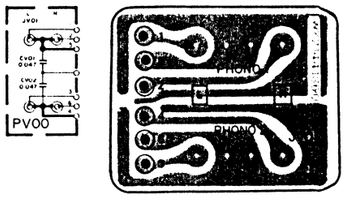
Head Phone Assembly (PX00) Schematic Diagram and Component Locations



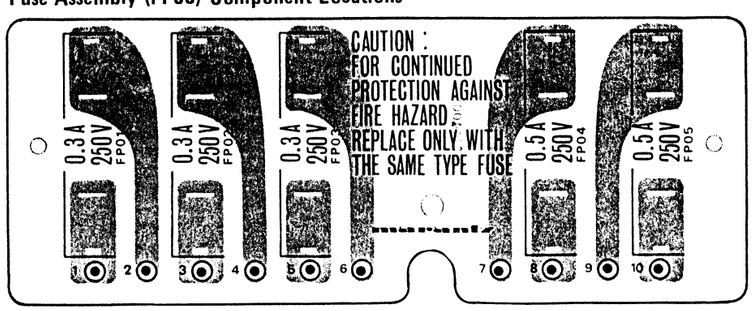
Power Switch Assembly (PU00) Schematic Diagram and Component Locations



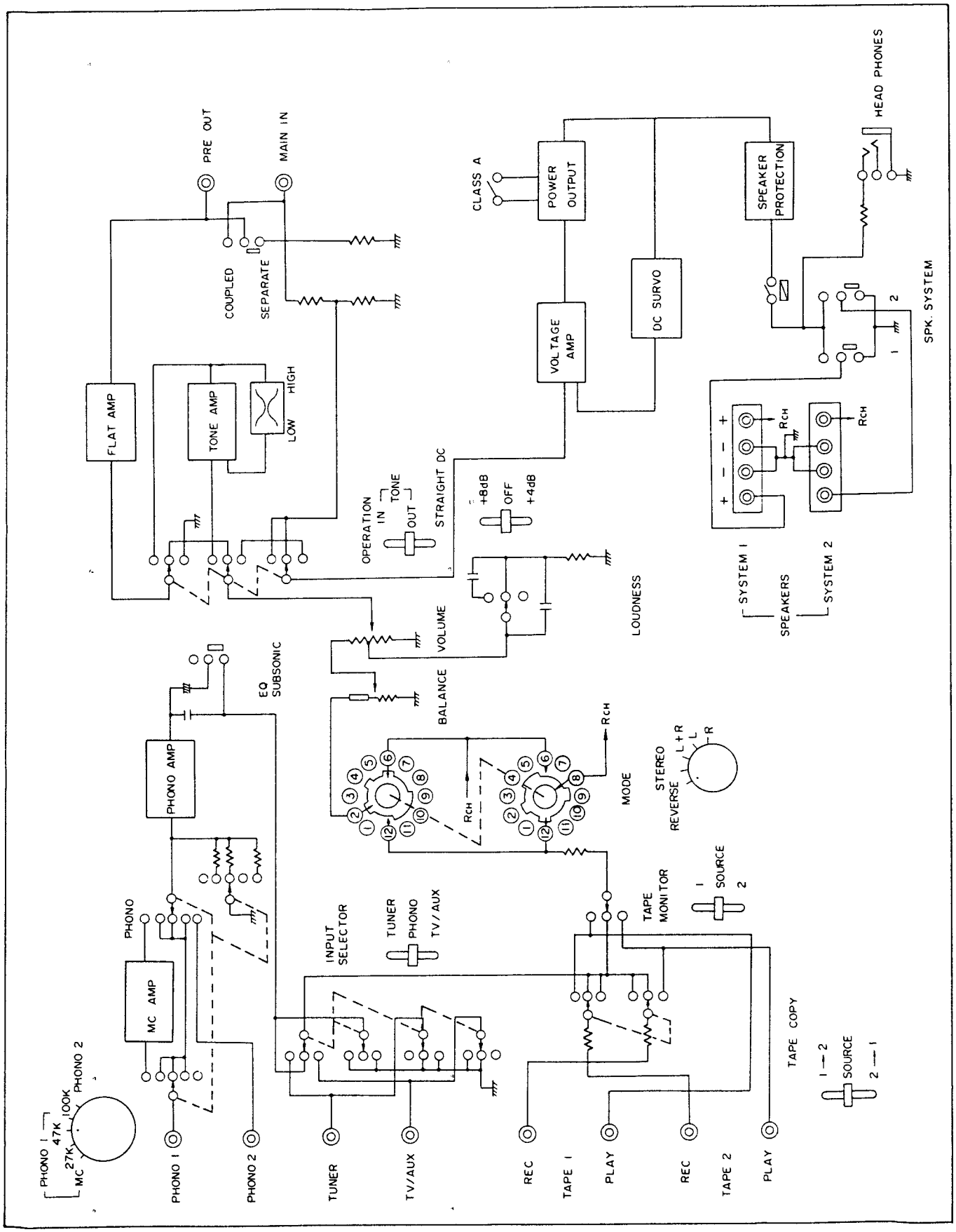
Phone Input Assembly (PV00) Schematic Diagram and Component Locations



Fuse Assembly (PP00) Component Locations

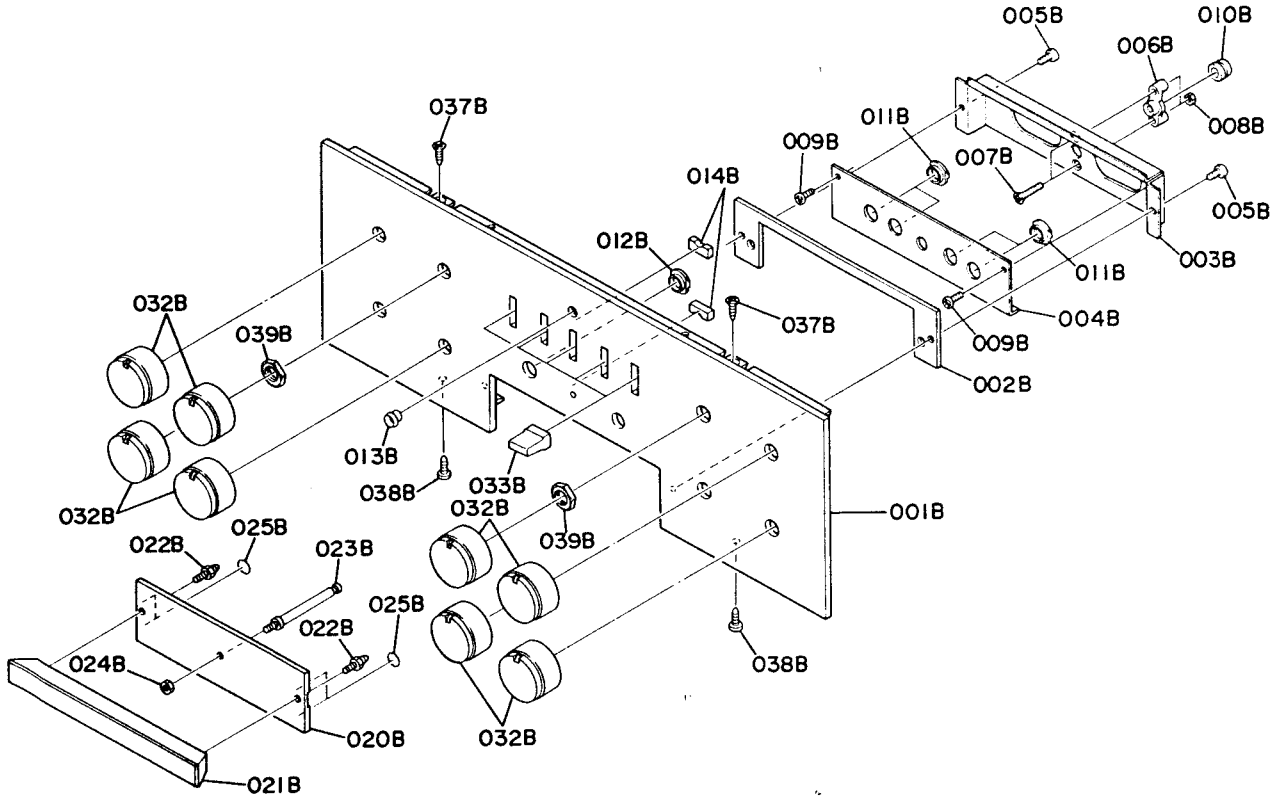


⊠ブロックダイアグラム


PRE OUT
MAIN IN
COUPLED
SEPARATE
CLASS A
POWER OUTPUT
SPEAKER PROTECTION
HEAD PHONES
FLAT AMP
TONE AMP
LOW HIGH
VOLTAGE AMP
DC SURVO
SPK. SYSTEM
OPERATION IN TONE OUT
STRAIGHT DC
+8dB OFF +4dB
SYSTEM 1
SYSTEM 2
SPEAKERS
LOUDNESS
VOLUME
BALANCE
EQ SUBSONIC
PHONO AMP
MODE
STEREO REVERSE L+R L R
RCH
INPUT SELECTOR
TUNER PHONO TV/AUX
TAPE MONITOR
SOURCE 1 2
PHONO
MC AMP
PHONO 1 47K 100K PHONO 2
MC 27K
TAPE COPY
1 — 2 SOURCE 2 — 1
PHONO 1
PHONO 2
TUNER
TV/AUX
REC
TAPE 1
PLAY
REC
TAPE 2
PLAY

⊠分解及び部品表

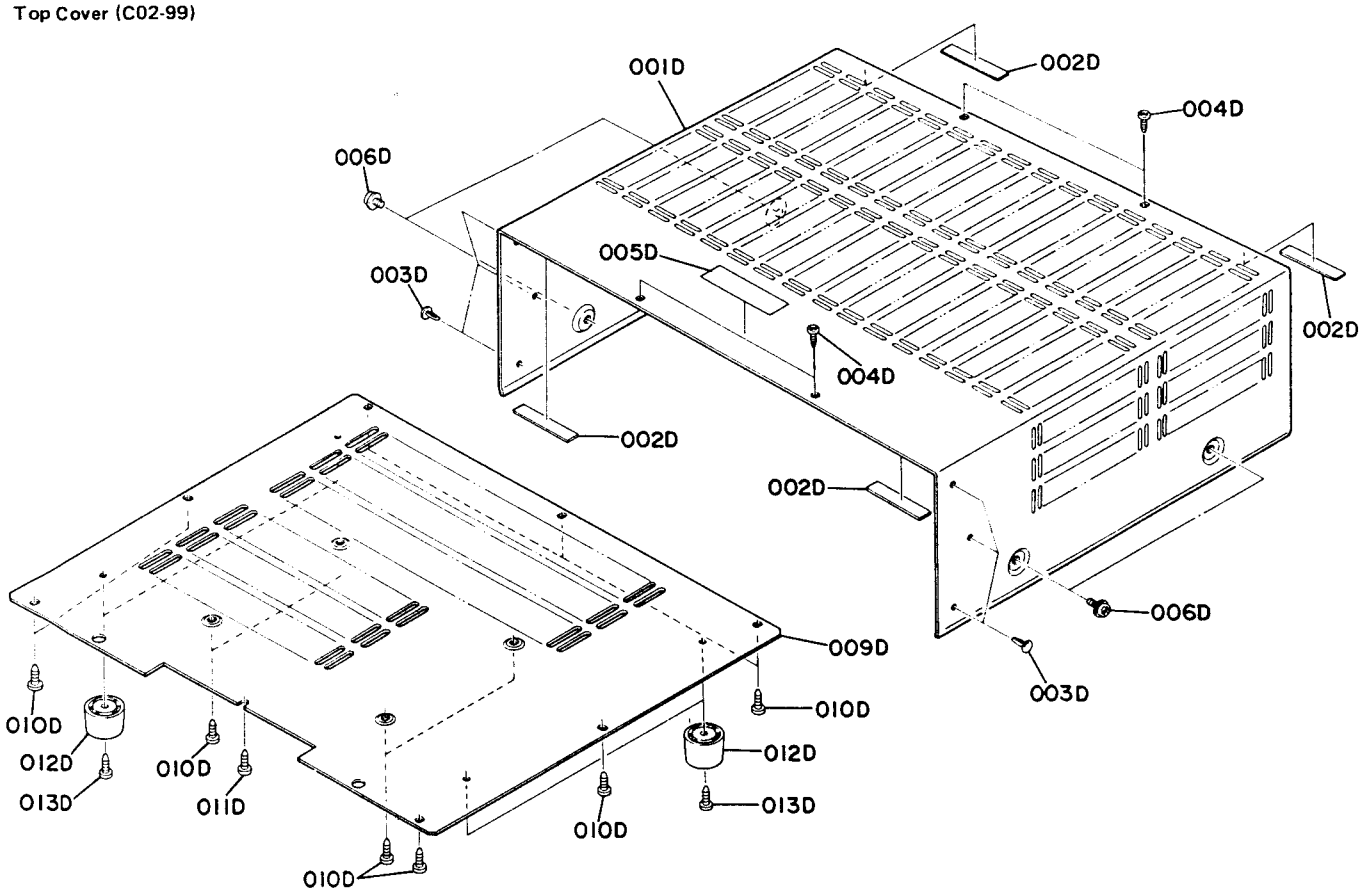
- Front Panel (C01-99)



REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION
A	1	2144063400	Front Panel Assembly
001B	1	2144063010	Escutcheon, Front Panel
002B	1	2461063030	Escutcheon, Pocket Frame
003B	1	2144160020	Bracket
004B	1	2144063020	Escutcheon, Pocket Panel
005B	2	51060305A9	P.H.M. Screw P3 x 5
006B	1	2461271010	Holder
007B	2	51042610A0	F.H.M. Screw F2.6 x 10
008B	2	53112603A0	Hexagon Nut
009B	2	51100204E0	B.H.M. Screw B2 x 4
010B	1	1143259010	Bushing, Pin Holder
011B	4	2978259010	Bushing, Push Switch
012B	1	2978259010	Bushing, Power Switch
013B	1	2462259010	Bushing, LED

REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION
B	1	2144063410	Pocket Cover Assembly
020B	1	2461063050	Escutcheon, Pocket Cover
021B	1	2461253110	Handle
022B	2	2461254010	Pin
023B	1	2461254020	Pin
024B	1	53110303E9	Hexagon Nut
025B	4	2461107020	Sheet
014B	2	2112053030	Cover
032B	8	2462154260	Knob
033B	5	2144154110	Knob, Lever Switch
037B	2	51340306B0	F.H. Tapped Screw F3× 6
038B	2	51280308U0	B.H. Tapped Screw B3× 8
039B	2	53118129G0	Hexagon Nut

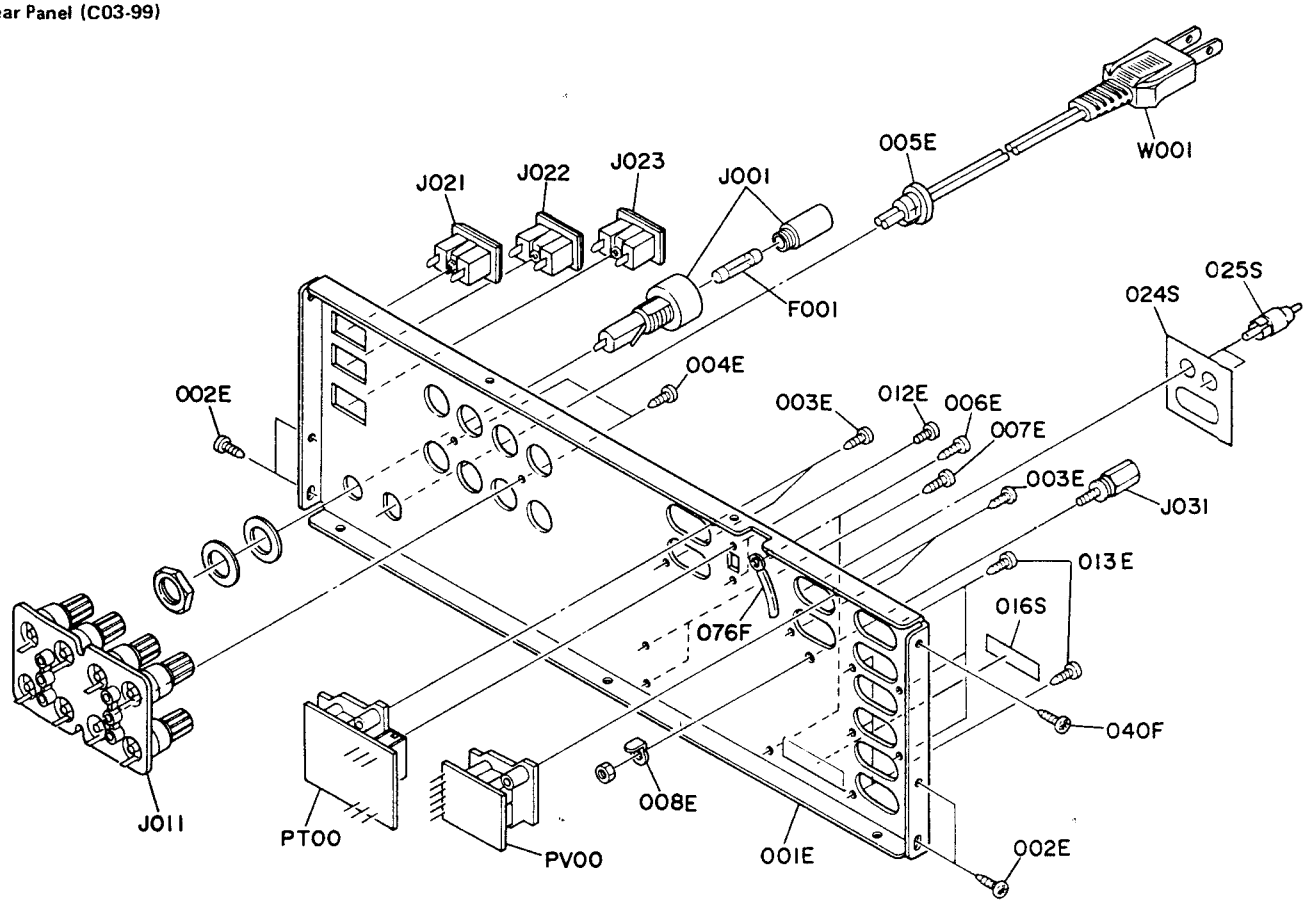
- Top Cover (C02-99)



REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION	
001D	1	2461257010	Lid, Top Cover	
002D	4	2965118010	Spacer	
003D	6	2991259010	Bushing	
004D	4	51260308Z0	Tapped Screw	3 x 8
005D	1	2144861010	Label	
006D	4	51480406Z9	F. Washer Screw	4 x 6

REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION	
009D	1	2144257010	Lid, Bottom Cover	
010D	11	51280410U0	B.H. Tapped Screw	B4 x 10
011D	1	51280406U0	B.H. Tapped Screw	B4 x 6
012D	4	2759057010	Leg	
013D	4	51570410S0	P. Taptite Screw	P4 x 10

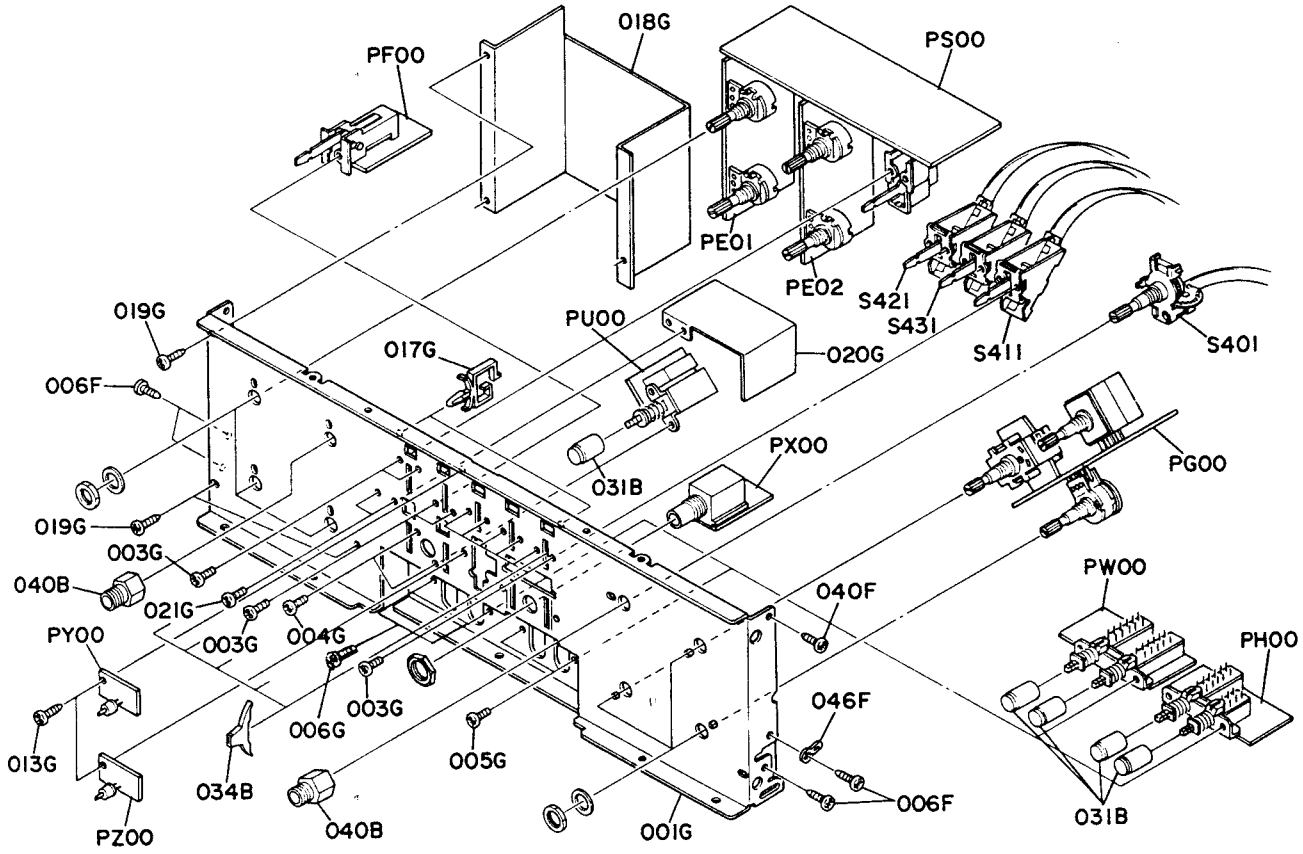
- Rear Panel (C03-99)



REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION	
001E	1	2144160210	Bracket, Rear Panel	
002E	4	5110308S9	B.H.M. Screw	B3 x 8
003E	4	51280308U0	B.H. Tapped Screw	B3 x 8
004E	2	51280308U0	B.H. Tapped Screw	B3 x 8
005E	1	1455259090	Bushing	
006E	2	51280308U0	B.H. Tapped Screw	B3 x 8
007E	2	51280308U0	B.H. Tapped Screw	B3 x 8
008E	1	62040029W0	Lug	
012E	2	5110260550	B.H.M. Screw	B2.6 x 5
013E	6	51280308U0	B.H. Tapped Screw	B3 x 8
040F	1	51280308B0	B.H. Tapped Screw	B3 x 8
076F	1	4220005040	Clamper	

REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION
016S	1	2112265010	Indicator
024S	1	2144863010	Hang Tag
025S	2	YQ01000020	Short Plug
⚠ F001	1	FS10800010	Fuse 8A 250V
⚠ J001	1	YJ08000300	Jack, Fuse Holder
J011	1	YT01080030	Terminal, Speaker System
⚠ J021	1	YJ04000560	Jack, AC Outlet
⚠ J022	1	YJ04000560	Jack, AC Outlet
⚠ J023	1	YJ04000560	Jack, AC Outlet
J031	1	YT01010050	Terminal, Ground
J032	1	YL01020080	Terminal (2P)
⚠ W001	1	YC02400182	A.C. Power Cord

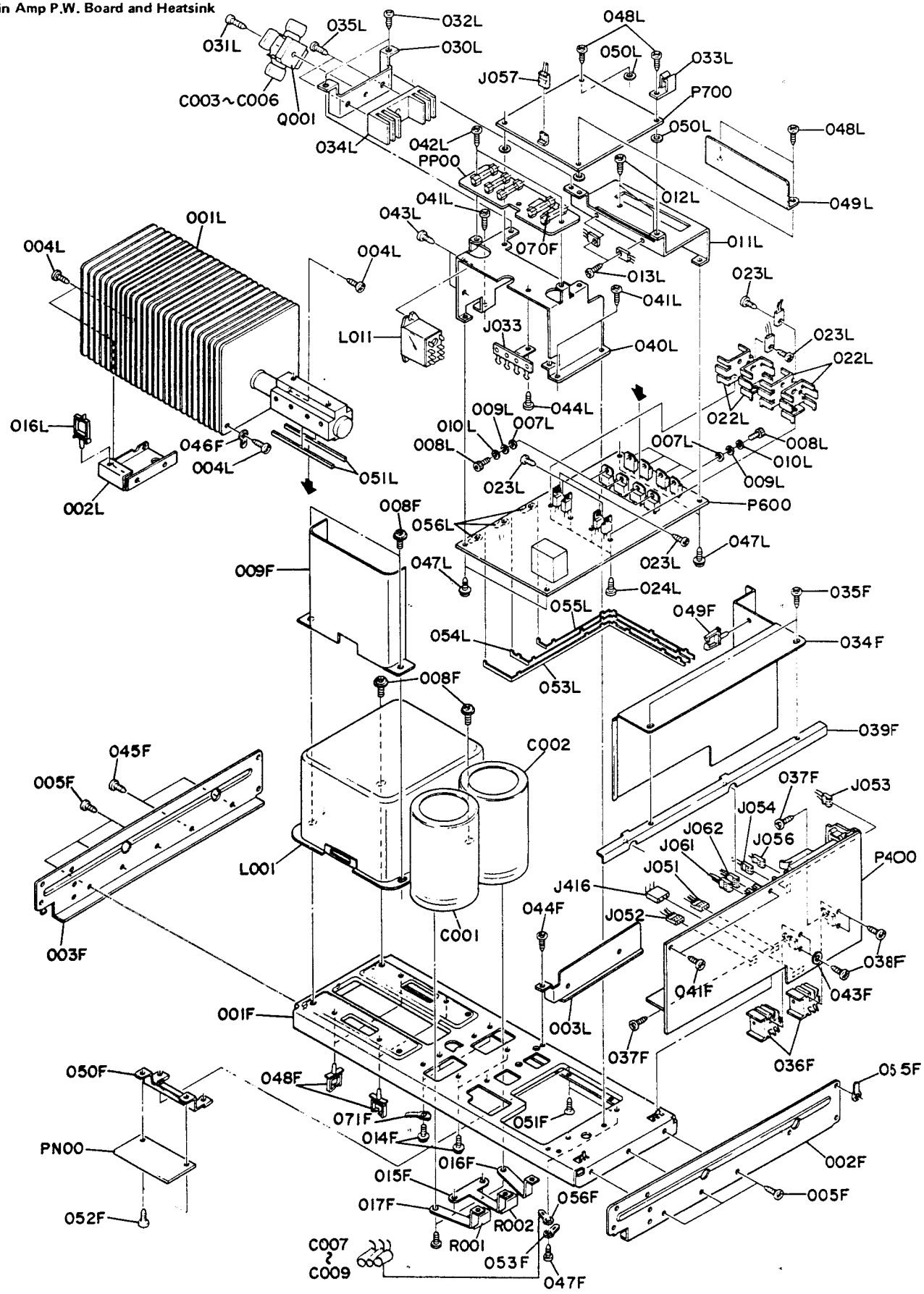
- Front Chassis and General Parts



REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION
031B	5	2462154220	Knob, Push Switch
034B	5	2144259010	Bushing, Lever Switch
040B	2	2462101040	Support
006F	4	5128030880	B.H. Tapped Screw B3 x 8
040F	1	5128030880	B.H. Tapped Screw B3 x 8
046F	1	62030039W0	Lug
001G	1	2144160010	Bracket, Front Chassis
003G	10	51100306A9	B.H.M. Screw B3 x 6
004G	2	51100306A9	B.H.M. Screw B3 x 6
005G	2	51100306A9	B.H.M. Screw B3 x 6
013G	2	5128030880	B.H. Tapped Screw B3 x 8
017G	2	2129005010	Clamper
018G	1	2144109050	Shield
019G	3	5128030880	B.H. Tapped Screw B3 x 8
020G	1	2144109020	Shield
021G	2	51100306A9	B.H.M. Screw B3 x 6
006G	2	51100306A9	B.H.M. Screw B3 x 6

REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION
S401	1	SR00050040	Rotary Switch, Phone Selector
S411	1	SC00030010	Switch, Input Selector
S421	1	SC00030010	Switch, Tape Copy
S431	1	SC00030010	Switch, Tape Monitor

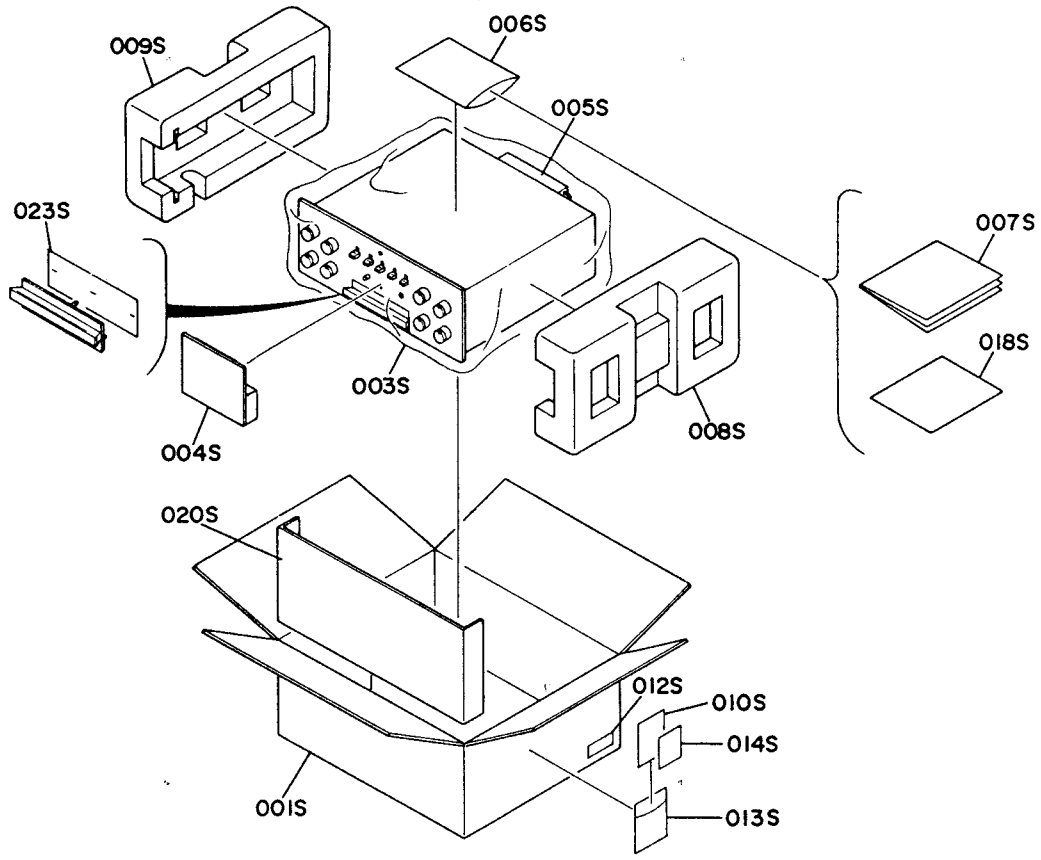
- Main Amp P.W. Board and Heatsink



REF. DESIG.	Q'TY F	PART NO.	DESCEIPTION
001F	1	2144105010	Chassis, Center
002F	1	2979105020	Side Chassis (R)
003F	1	2979105030	Side Chassis (L)
005F	6	51280408B0	B.H. Tapped Screw B4 x 8
008F	4	51490410S9	L. Washer Screw 4 x 10
009F	1	2144109030	Shield
014F	6	51480406S9	F. Washer Screw 4 x 6
015F	1	2144123010	Contactor
016F	1	2144123020	Contactor
017F	1	2144123030	Contactor
019F	3	51100308E9	B.H.M. Screw B3 x 8
034F	1	2144109010	Shield
035F	2	51280308U0	B.H. Tapped Screw B3 x 8
036F	2	2144267030	Heatsink
037F	2	51280308B0	B.H. Tapped Screw B3 x 8
038F	4	51300308B0	P.H. Tapped Screw P3 x 8
039F	1	2144160080	Bracket
041F	2	51280308B0	B.H. Tapped Screw B3 x 8
044F	1	51280308B0	B.H. Tapped Screw B3 x 8
045F	2	51280308B0	B.H. Tapped Screw B3 x 8
046F	1	62030039W0	Lug
047F	1	51280308B0	B.H. Tapped Screw B3 x 8
048F	5	2129005010	Clamper
049F	1	2886005060	Clamper
050F	1	2144160090	Bracket
051F	2	51500306B0	F.H. Tapped Screw F3 x 6
052F	2	51280306B0	B.H. Tapped Screw B3 x 6
055F	1	62030049W0	Lug
056F	1	62030049W0	Lug
001L	1	2144267010	Heatsink
002L	1	2144160040	Bracket
003L	1	2144160050	Bracket
004L	4	51280306B0	B.H. Tapped Screw B3 x 6
008L	8	52730310S9	H.S. Head Bolt 3 x 10
009L	8	54020301E0	Flat Washer, P.
010L	8	54040302N0	Spring Washer
011L	1	2144160070	Bracket
012L	2	51280306U0	B.H. Tapped Screw B3 x 6
013L	2	51280308U0	B.H. Tapped Screw B3 x 8
016L	1	2886005020	Clamper
022L	4	2212267020	Heatsink
023L	8	51280308B0	B.H. Tapped Screw B3 x 8
024L	4	51280308B0	B.H. Tapped Screw B3 x 8
030L	1	2144267020	Heatsink
031L	1	51280314B0	B.H. Tapped Screw B3 x 14
032L	2	51280308U0	B.H. Tapped Screw B3 x 8
033L	1	2887005110	Clamper
040L	1	2144160060	Bracket
041L	3	51280308U0	B.H. Tapped Screw B3 x 8
042L	2	51280308U0	B.H. Tapped SCrew B3 x 8
043L	2	51280308U0	B.H. Tapped Screw B3 x 8
044L	1	51280306U0	B.H. Tapped Screw B3 x 6
047L	4	51260308B0	Screw 3 x 8
048L	4	51280308U0	B.H. Tapped Screw B3 x 8
050L	4	59030808P0	Washer
051L	2	2144118010	Spacer
053L	1	2144123040	Contactor
054L	1	2144123050	Contactor
055L	1	2144123060	Contactor
056L	3	62031240W0	Lug

REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION
⚠ C001	1	EB22907510	Elect Cap. 22000μF 75V
⚠ C002	1	EB22907510	Elect Cap. 22000μF 75V
C003	1	DF17104520	Film Cap. 0.1μF ±20% 200V
C004	1	DF17104520	Film Cap. 0.1μF ±20% 200V
C005	1	DF17104520	Film Cap. 0.1μF ±20% 200V
C006	1	DF17104520	Film Cap. 0.1μF ±20% 200V
C007	1	DK18473320	Ceramic Cap. 0.47μF 50V
C008	1	DK18473320	Ceramic Cap. 0.47μF 50V
C009	1	DK18473320	Ceramic Cap. 0.47μF 50V
J033	1	YL01040160	Terminal, (4P)
J051	1	YJ06002200	Jack, (3P)
J052	1	YJ06002210	Jack, (3P)
J053	1	YJ06002220	Jack, (3P)
J054	1	YJ06002230	Jack, (2P)
J056	1	YJ06002240	Jack, (2P)
J057	1	YJ06002250	Jack, (3P)
J061	1	YJ06002300	Jack, (3P)
J062	1	YJ06002310	Jack, (3P)
⚠ L001	1	TS60508010	Power Transformer
⚠ L011	1	LY20480050	Relay FRL263
⚠ Q001	1	HD20004290	Diode S5VB-20
⚠ R001	1	GS10222030	Resistor 2.2KΩ ±10% 3W
⚠ R002	1	GS10222030	Resistor 2.2KΩ ±10% 3W
R003	1	GD05332140	Resistor 3.3KΩ ±5% ¼W
C011	1	DF17105540	Film 1μF ±20%
C012	1	DF17105540	Film 1μF ±20%
C013	1	DF17105540	Film 1μF ±20%
C014	1	DF17105540	Film 1μF ±20%
C015	1	DF16105520	Film 1μF ±10%
C016	1	DF16105520	Film 1μF ±10%
J058	1	YU08200010	Jumper Lead 115mm
J059	1	YU06200010	Jumper Lead
043F	1	59030805P1	Washer
053F	1	62030039W0	Lug For Chassis
007L	8	2144259020	Bushing For Power Transistor
013L	2	51280308U0	B.H. Tapped Screw B3 x 8
034L	1	2144267040	Heatsink
035L	2	5128030880	B.H.M. Screw B3 x 8
049L	1	2144109040	Shield
070F	2	9510601010	1A 250V FUSE (LABEL)
071F	4	62051870W0	Lug for C011~C014

- Packing Materials



REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION
001S	1	2144801010	Packing Case
003S	1	9090909040	Polyethylene Sheet
004S	1	2144809020	Cushion
005S	1	2864804010	Sleeve
006S	1	9013025010	Polyethylene Bag
007S	1	2144851110	Instructions
008S	1	2139809010	Cushion (R)
009S	1	2139809020	Cushion (L)

REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION
010S	1	9631000110	Guarantee Card
012S	2	9526019040	Serial No. Card
013S	1	2976813020	Envelope
014S	1	2976851040	Instructions
018S	1	9650000030	S. Station Card
020S	1	2144807010	Reinforcing
023S	1	2461107010	Sheet

◇電気部品表

REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION
			P400-PRE-AMP. CIRCUIT BOARD
P400	1	WK21441510	P.W. Board, Pre-Amp.
			P400-CAPACITORS
CM01	1	EA22700690	Elect 220μF 6.3V
CM02	1	EA22700690	Elect 220μF 6.3V
CM03	1	DF16152510	Film 0.0015μF ±10%
CM04	1	DF16152510	Film 0.0015μF ±10%
CM05	1	EA10800690	Elect 1000μF 6.3V
CM06	1	EA10800690	Elect 1000μF 6.3V
CM07	1	EA10800690	Elect 1000μF 6.3V
CM08	1	EA10800690	Elect 1000μF 6.3V
CM09	1	DF16222510	Film 0.0022μF ±10%
CM10	1	DF16222510	Film 0.0022μF ±10%
CM11	1	DF16222510	Film 0.0022μF ±10%
CM12	1	DF16222510	Film 0.0022μF ±10%
CM13	1	DF16222510	Film 0.0022μF ±10%
CM14	1	DF16222510	Film 0.0022μF ±10%
CM15	1	EA10602530	Elect 10μF 25V
CM16	1	EA10602530	Elect 10μF 25V
CM17	1	DF76470550	Film 47pF ±10%
CM18	1	DF76470550	Film 47pF ±10%
CM19	1	EA22603590	Elect 22μF 35V
CM20	1	EA22603590	Elect 22μF 35V
CM21	1	EA47701690	Elect 470μF 16V
CM22	1	EA47701690	Elect 470μF 16V
CM23	1	DF16152510	Film 0.0015μF ±10%
CM24	1	DF16152510	Film 0.0015μF ±10%
C401	1	DF76101550	Film 100pF ±10%
C402	1	DF76101550	Film 100pF ±10%
C403	1	EA10800690	Elect 1000μF 6.3V
C404	1	EA10800690	Elect 1000μF 6.3V
C405	1	EA10800690	Elect 1000μF 6.3V
C406	1	EA10800690	Elect 1000μF 6.3V
C407	1	DF16222510	Film 0.0022μF ±10%
C408	1	DF16222510	Film 0.0022μF ±10%
C409	1	DF16222510	Film 0.0022μF ±10%
C410	1	DF16222510	Film 0.0022μF ±10%
C411	1	DF16152300	Film 1500pF ±10%
C412	1	DF16152300	Film 1500pF ±10%
C413	1	DF55681090	Film 680pF ±5%
C414	1	DF55681090	Film 680pF ±5%
C415	1	DF74333010	Film 0.033μF ±2%
C416	1	DF74333010	Film 0.033μF ±2%
C417	1	DF74104010	Film 0.1μF ±2%
C418	1	DF74104010	Film 0.1μF ±2%
C419	1	DF14362010	Film 3600pF ±2%
C420	1	DF14362010	Film 3600pF ±2%
C421	1	DF64272010	Film 2700pF ±2%
C422	1	DF64272010	Film 2700pF ±2%
C423	1	DF16152510	Film 1500pF ±10%
C424	1	DF16152510	Film 1500pF ±10%
C425	1	EA22703590	Elect 220μF 35V
C426	1	EA22703590	Elect 220μF 35V
C435	1	DF55681090	Film 680pF ±5%
C436	1	DF55681090	Film 680pF ±5%
⚠C801	1	EB10805070	Elect 1000μF 50V
⚠C802	1	EB10805070	Elect 1000μF 50V
C805	1	DF55391090	Film 390pF ±5%
C806	1	DF55391090	Film 390pF ±5%
C807	1	EA10701030	Elect 100μF 10V
C808	1	EA10701030	Elect 100μF 10V
C809	1	EA10505030	Elect 1μF 50V
C810	1	EA10505030	Elect 1μF 50V
⚠C811	1	EA22703590	Elect 220μF 35V
⚠C812	1	EA22703590	Elect 220μF 35V
C815	1	DK18103510	Ceramic 0.01μF
C816	1	DK18103510	Ceramic 0.01μF
C817	1	DK18103510	Ceramic 0.01μF
C818	1	DK18103510	Ceramic 0.01μF
			P400-RESISTORS (All Resistors are ±5% and ¼W)
RM01	1	GM21415000	150Ω ±2%
RM02	1	GM21415000	150Ω ±2%
RM03	1	GM21415000	150Ω ±2%
RM04	1	GM21415000	150Ω ±2%
RM05	1	GD05010140	1Ω
RM06	1	GD05010140	1Ω
RM07	1	GM21447000	470Ω ±2%
RM08	1	GM21447000	470Ω ±2%
RM09	1	GM21447000	470Ω ±2%
RM10	1	GM21447000	470Ω ±2%
RM11	1	GM21456010	5.6KΩ ±2%
RM12	1	GM21456010	5.6KΩ ±2%
RM13	1	GM21456010	5.6KΩ ±2%
RM14	1	GM21456010	5.6KΩ ±2%
RM15	1	GD05150140	15Ω
RM16	1	GD05150140	15Ω
RM17	1	GD05150140	15Ω
RM18	1	GD05150140	15Ω
RM19	1	GM21447000	470Ω ±2%
RM20	1	GM21447000	470Ω ±2%
RM21	1	GM21447000	470Ω ±2%
RM22	1	GM21447000	470Ω ±2%
RM23	1	GM214270G0	27Ω ±2%
RM24	1	GM214270G0	27Ω ±2%
RM25	1	GD05680140	680Ω
RM26	1	GD05680140	680Ω
RM27	1	GD05680140	680Ω
RM28	1	GD05680140	680Ω
RM29	1	GD05562140	5.6KΩ
RM30	1	GD05562140	5.6KΩ
RM31	1	GD05272140	2.7KΩ
RM32	1	GD05272140	2.7KΩ
RM33	1	GD05332140	3.3KΩ
RM34	1	GD05332140	3.3KΩ
RM39	1	GD05101140	100Ω
RM40	1	GD05101140	100Ω
RM41	1	GD05273140	27KΩ
RM42	1	GD05273140	27KΩ
RM43	1	GA05471010	470Ω 1W
RM44	1	GA05471010	470Ω 1W
R401	1	GM21439020	39KΩ ±2%
R402	1	GM21439020	39KΩ ±2%
R403	1	GM21410030	100KΩ ±2%
R404	1	GM21410030	100KΩ ±2%
R405	1	GM21410030	100KΩ ±2%
R406	1	GM21410030	100KΩ ±2%
R407	1	GM21410030	100KΩ ±2%
R408	1	GM21410030	100KΩ ±2%
R409	1	GM21410010	100Ω ±2%
R410	1	GM21410010	100Ω ±2%

REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION
R411	1	GM21410010	1KΩ ±2%
R412	1	GM21410010	1KΩ ±2%
R413	1	GM21410010	1KΩ ±2%
R414	1	GM21410010	1KΩ ±2%
R415	1	GD05822140	8.2KΩ
R416	1	GD05822140	8.2KΩ
R417	1	GD05682140	6.8KΩ
R418	1	GD05682140	6.8KΩ
R419	1	GD05822140	8.2KΩ
R420	1	GD05822140	8.2KΩ
R421	1	GD05682140	6.8KΩ
R422	1	GD05682140	6.8KΩ
R423	1	GD05151140	150Ω
R424	1	GD05151140	150Ω
R425	1	GD05151140	150Ω
R426	1	GD05151140	150Ω
R427	1	GM21456020	56KΩ ±2%
R428	1	GM21456020	56KΩ ±2%
R429	1	GM21456020	56KΩ ±2%
R430	1	GM21456020	56KΩ ±2%
R431	1	GM214390G0	39Ω ±2%
R432	1	GM214390G0	39Ω ±2%
R433	1	GD05272140	2.7KΩ
R434	1	GD05272140	2.7KΩ
R435	1	GD05272140	2.7KΩ
R436	1	GD05272140	2.7KΩ
R437	1	GD05151140	150Ω
R438	1	GD05151140	150Ω
R439	1	GD05151140	150Ω
R440	1	GD05151140	150Ω
R441	1	GD05182140	1.8KΩ
R442	1	GD05182140	1.8KΩ
R443	1	GD05272140	2.7KΩ
R444	1	GD05272140	2.7KΩ
R445	1	GD05100140	10Ω
R446	1	GD05100140	10Ω
R447	1	GD05100140	10Ω
R448	1	GD05100140	10Ω
R449	1	GD05100140	10Ω
R450	1	GD05100140	10Ω
R451	1	GD05100140	10Ω
R452	1	GD05100140	10Ω
R453	1	GM21422010	2.2KΩ ±2%
R454	1	GM21422010	2.2KΩ ±2%
R455	1	GM214680G0	68Ω ±2%
R456	1	GM214680G0	68Ω ±2%
R457	1	GD05391140	390Ω
R458	1	GD05391140	390Ω
R459	1	GD05224140	220KΩ
R460	1	GD05224140	220KΩ
R461	1	GG05820120	82Ω ½W
R462	1	GG05820120	82Ω ½W
R463	1	GD05561140	560Ω
R464	1	GD05561140	560Ω
R465	1	GD05221140	220Ω
R466	1	GD05221140	220Ω
R467	1	GD05221140	220Ω
R468	1	GD05221140	220Ω
R471	1	GD05222140	2.2KΩ
R472	1	GD05222140	2.2KΩ

REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION
R801	1	GD05151140	150Ω
R802	1	GD05151140	150Ω
R803	1	GD05102140	1KΩ
R804	1	GD05102140	1KΩ
R805	1	GG05272120	2.7KΩ ½W
R806	1	GG05272120	2.7KΩ ½W
R807	1	GD05183140	18KΩ
R808	1	GD05183140	18KΩ
R809	1	GD05512140	5.1KΩ
R810	1	GD05512140	5.1KΩ
			P400-SEMICONDUCTORS
Q417	1	HT323201F0	Transistor 2SC2320(F)
Q418	1	HT323201F0	Transistor 2SC2320(F)
Q419	1	HT325912B0	Transistor 2SC2591(Q or R)
Q420	1	HT325912B0	Transistor 2SC2591(Q or R)
Q421	1	HT111112B0	Transistor 2SA1111(Q or R)
Q422	1	HT111112B0	Transistor 2SA1111(Q or R)
Q423	1	HD20011050	Diode 1S1555
Q424	1	HD20011050	Diode 1S1555
Q425	1	HD20011050	Diode 1S1555
Q426	1	HD20011050	Diode 1S1555
Q427	1	HD20011050	Diode 1S1555
Q801	1	HT325912B0	Transistor 2SC2591(Q or R)
Q802	1	HT111112B0	Transistor 2SA1111(Q or R)
Q803	1	HT322402A0	Transistor 2SC2240(GR or BL)
Q804	1	HT109702A0	Transistor 2SA970(GR or BL)
Q805	1	HF200301C0	F.E.T. 2SK30A(Y)
Q806	1	HF200301C0	F.E.T. 2SK30A(Y)
Q807	1	HT317752D0	Transistor 2SC1775A(D or E)
Q808	1	HT108722D0	Transistor 2SA872A(D or E)
Q809	1	HD30008010	Zener HZ6B1L
Q810	1	HD30008010	Zener HZ6B1L
Q811	1	HD20015030	Diode DS135D
Q812	1	HD20015030	Diode DS135D
Q813	1	HD20015030	Diode DS135D
Q814	1	HD20015030	Diode DS135D
			P400-MISCELLANEOUS
J401	1	YT02040330	Terminal (4P) RCA
J402	1	YT02040330	Terminal (4P) RCA
J403	1	YT02040330	Terminal (4P) RCA
J404	1	YP01001030	Plug (3P)
J405	1	YP01001030	Plug (3P)
J406	1	YP01001030	Plug (3P)
J407	1	YP10001980	Plug (2P)
J408	1	YP10001980	Plug (2P)
J409	1	YP06001040	Plug (3P)
J414	1	YP01001030	Plug (3P)
J415	1	YP01001030	Plug (3P)
J416	1	YJ06001040	Jack (3P)
L401	1	LY20240160	Relay FRL-644D24/2BS
S401	1	SR00050040	Rotary Switch, Phono Selector
S402	1	SS06060030	Slide Switch Phono
S411	1	SC00030010	Switch, Input Selector
S412	1	SB13070020	Switch Band, FLX
S413	1	SS08040020	Slide Switch 8-4 S Main
S421	1	SC00030010	Switch, Tape Copy
S422	1	SB13970010	Switch Band, FLX, Tape cope
S423	1	SS04040040	Slide Switch 4-4 NS Main
S431	1	SC00030010	Switch, Tape Monitor
S432	1	SB13670010	Switch Band, FLX, Tape Moniter
S433	1	SS04040040	Slide Switch 4-4 NS Main

REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION
			P401-MM TRANSISTOR BLOCK CIRCUIT BOARD
P401	1	WH21441330	P.W. Board, MM Transistor Block
			P401-SEMICONDUCTORS
Q401	1	HF201512B0	F.E.T. 2SK151(F or G)
Q402	1	HF201512B0	F.E.T. 2SK151(F or G)
Q403	1	HF100512B0	F.E.T. 2SJ51(F or G)
Q404	1	HF100512B0	F.E.T. 2SJ51(F or G)
Q405	1	HT322401B0	Transistor 2SC2240(BL)
Q406	1	HT322401B0	Transistor 2SC2240(BL)
Q407	1	HT109701B0	Transistor 2SA970(BL)
Q408	1	HT109701B0	Transistor 2SA970(BL)
Q409	1	HT109701A0	Transistor 2SA970(GR)
Q410	1	HT109701A0	Transistor 2SA970(GR)
Q411	1	HT322401A0	Transistor 2SC2240(GR)
Q412	1	HT322401A0	Transistor 2SC2240(GR)
Q413	1	HT108722D0	Transistor 2SA872A(D or E)
Q414	1	HT108722D0	Transistor 2SA872A(D or E)
Q415	1	HT317752D0	Transistor 2SC1775A(D or E)
Q416	1	HT317752D0	Transistor 2SC1775A (D or E)
			P401-PLUGS
J412	1	YP06000750	Plug, (14P)
J413	1	YP06000750	Plug, (14P)
			P600-OUTPUT AMP. CIRCUIT BOARD
P600	1	WK21441210	P.W. Board, Output Amp.
			P600-CAPACITORS
C601	1	DF76470550	Film 47pF ±10%
C602	1	DF76470550	Film 47pF ±10%
C603	1	EA10602530	Elect 10μF 25V
C604	1	EA10602530	Elect 10μF 25V
C605	1	DF16104350	Film 0.1μF ±10%
C606	1	DF16104350	Film 0.1μF ±10%
C609	1	DF17104520	Film 0.1μF ±20%
C610	1	DF17104520	Film 0.1μF ±20%
C613	1	EA10505030	Elect 1μF 50V
C614	1	EA47602530	Elect 47μF 25V
C615	1	EA22601630	Elect 22μF 16V
⚠C616	1	EA22708020	Elect 220μF 80V
⚠C617	1	EA22708020	Elect 220μF 80V
C620	1	DK18103510	Ceramic 0.01μF
C621	1	DK18103510	Ceramic 0.01μF
C622	1	DK18103510	Ceramic 0.01μF
C625	1	DF16222350	Film 2200pF ±10%
C626	1	EA10602530	Elect 10μF 25V
C627	1	DF16473350	Film 0.047μF ±10%
C628	1	DF16473350	Film 0.047μF ±10%
C631	1	DF16105510	Film 1μF ±10%
C632	1	DF16105510	Film 1μF ±10%
C633	1	DF16223300	Film 0.022μF ±10%
C634	1	DF16223300	Film 0.022μF ±10%
C635	1	EA10610010	Elect 10μF 100V
C636	1	EA10610010	Elect 10μF 100V
C637	1	EA10610010	Elect 10μF 100V
C638	1	EA10610010	Elect 10μF 100V
C640	1	EA22601630	Elect 22μF 16V
C641	1	DF76220500	Film 22pF ±10%
C642	1	DF76220500	Film 22pF ±10%

REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION
			P600-RESISTORS (All Resistors are ±5% and ¼W)
R601	1	GD05472140	4.7KΩ
R602	1	GD05472140	4.7KΩ
R603	1	GD05153140	15KΩ
R604	1	GD05153140	15KΩ
R605	1	GD05102140	1KΩ
R606	1	GD05102140	1KΩ
R607	1	GD05683140	68KΩ
R608	1	GD05683140	68KΩ
R609	1	GD05683140	68KΩ
R610	1	GD05683140	68KΩ
R611	1	GD05821140	820Ω
R612	1	GD05821140	820Ω
R613	1	GG05101140	100Ω
R614	1	GG05101140	100Ω
R615	1	GG05101140	100Ω
R616	1	GG05101140	100Ω
R617	1	GG05471140	470Ω
R618	1	GG05471140	470Ω
R619	1	GA05103010	10KΩ 1W
R620	1	GA05103010	10KΩ 1W
R621	1	GG05330140	33Ω
R622	1	GG05330140	33Ω
R623	1	GG05330140	33Ω
R624	1	GG05330140	33Ω
R625	1	GG05470140	47Ω
R626	1	GG05470140	47Ω
R627	1	GG05330140	33Ω
R628	1	GG05330140	33Ω
R629	1	GG05220140	22Ω
R630	1	GG05220140	22Ω
R631	1	GG05220140	22Ω
R632	1	GG05220140	22Ω
R633	1	GG05220140	22Ω
R634	1	GG05220140	22Ω
R635	1	GG05220140	22Ω
R636	1	GG05220140	22Ω
⚠R637	1	GO10272050	0.27Ω ±10% 5W
⚠R638	1	GO10272050	0.27Ω ±10% 5W
⚠R639	1	GO10272050	0.27Ω ±10% 5W
⚠R640	1	GO10272050	0.27Ω ±10% 5W
⚠R641	1	GO10272050	0.27Ω ±10% 5W
⚠R642	1	GO10272050	0.27Ω ±10% 5W
⚠R643	1	GO10272050	0.27Ω ±10% 5W
⚠R644	1	GO10272050	0.27Ω ±10% 5W
R645	1	GD05472140	4.7KΩ
R646	1	GD05472140	4.7KΩ
R649	1	GD05682140	6.8KΩ
R650	1	GD05102140	1KΩ
R651	1	GD05273140	27KΩ
R652	1	GD05273140	27KΩ
R653	1	GA05100030	10Ω 3W
R654	1	GA05100030	10Ω 3W
R655	1	RC10022120	2.2Ω ±10% ½W
R656	1	RC10022120	2.2Ω ±10% ½W
R657	1	GD05823140	82KΩ
R658	1	GD05823140	82KΩ
R659	1	GD05393140	39KΩ
R660	1	GD05104140	100KΩ
R661	1	GD05473140	47KΩ
R662	1	GD05473140	47KΩ

REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION
R663	1	GD05274140	270KΩ
R664	1	GD05183140	18KΩ
R666	1	GD05223140	22KΩ
R667	1	GD05183140	18KΩ
R668	1	GA05152010	1.5KΩ 1W
R669	1	GG05272120	2.7KΩ ½W
R670	1	HD30037090	Zener BZ-140
R671	1	GA05103010	10KΩ 1W
R672	1	GA05103010	10KΩ 1W
			P600-SEMICONDUCTORS
Q601	1	HT315681S0	Transistor 2SC1568(S)
Q602	1	HT315681S0	Transistor 2SC1568(S)
Q603	1	HT110152A0	Transistor 2SA1015(Q or Y)
Q604	1	HT110152A0	Transistor 2SA1015(Q or Y)
Q605	1	HT326322R0	Transistor 2SC2632(R or S)
Q606	1	HT326322R0	Transistor 2SC2632(R or S)
Q607	1	HT111242R0	Transistor 2SA1124(R or S)
Q608	1	HT111242R0	Transistor 2SA1124(R or S)
Q609	1	HT325912B0	Transistor 2SC2591(Q or R)
Q610	1	HT111112B0	Transistor 2SA1111(Q or R)
Q611	1	HT325912B0	Transistor 2SC2591(Q or R)
Q612	1	HT111112B0	Transistor 2SA1111(Q or R)
⚠Q613	1	HT327062A0	Transistor 2SC2706(R or O)
Q614	1	HT111462A0	Transistor 2SA1146(R or O)
⚠Q615	1	HT327062A0	Transistor 2SC2706(R or O)
⚠Q616	1	HT111462A0	Transistor 2SA1146(R or O)
⚠Q617	1	HT327062A0	Transistor 2SC2706(R or O)
Q618	1	HT111462A0	Transistor 2SA1146(R or O)
⚠Q619	1	HT327062A0	Transistor 2SC2706(R or O)
⚠Q620	1	HT111462A0	Transistor 2SA1146(R or O)
Q621	1	HT318152A0	Transistor 2SC1815(O or Y)
Q622	1	HT318152A0	Transistor 2SC1815(Q or Y)
Q623	1	HT110152A0	Transistor 2SA1015(O or Y)
Q624	1	HC10042050	IC TA7317P
Q625	1	HD20010210	Diode 1S2471G
Q626	1	HD20010210	Diode 1S2471G
Q627	1	HD20010210	Diode 1S2471G
Q628	1	HD20010210	Diode 1S2471G
Q629	1	HD20015030	Diode DS135D
Q630	1	HD20015030	Diode DS135D
Q631	1	HD20015030	Diode DS135D
Q632	1	HD20015030	Diode DS135D
Q633	1	HD20011010	Diode W06C
Q634	1	HD20011010	Diode W06C
Q635	1	HD20011010	Diode W06C
Q636	1	HD20011010	Diode W06C
Q639	1	HD20011050	Diode 1S1555
Q640	1	HD20015030	Diode DS135D
Q641	1	HD20011050	Diode 1S1555
⚠Q642	1	HD20015030	Diode DS135D
⚠Q643	1	HD20015030	Diode DS135D
⚠Q644	1	HD20015030	Diode DS135D
⚠Q645	1	HD20015030	Diode DS135D
Q647	1	HD20011050	Diode 1S1555
Q648	1	HD20011050	Diode 1S1555
Q649	1	HD30064090	Zener BZ-240
			P600-MISCELLANEOUS
L601	1	LJ28115090	Coil
L602	1	LJ28115090	Coil
L603	1	LY20240152	Relay

REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION
			P700-VOLTAGE AMP. CIRCUIT BOARD
P700	1	WK21441220	P.W. Board, Voltage Amp.
			P700-CAPACITORS
C701	1	DF55101090	Film 100pF ±5%
C702	1	DF55101090	Film 100pF ±5%
C703	1	DF76470550	Film 47pF ±10%
C704	1	DF76470550	Film 47pF ±10%
C709	1	DF76220550	Film 22pF ±10%
C710	1	DF76220550	Film 22pF ±10%
C711	1	DF16474510	Film 0.47μF ±10%
C712	1	DF16474510	Film 0.47μF ±10%
C713	1	DF16102350	Film 0.001μF ±10%
C714	1	DF16102350	Film 0.001μF ±10%
C715	1	EA47701630	Elect 470μF 16V
C716	1	EA47701630	Elect 470μF 16V
C771	1	EA47602530	Elect 47μF 25V
C772	1	EA47602530	Elect 47μF 25V
C773	1	EA47601630	Elect 47μF 16V
C775	1	EA10710010	Elect 100μF 100V
C776	1	EA10710010	Elect 100μF 100V
C777	1	DF16102510	Film 0.001μF ±10%
C778	1	DF16102510	Film 0.001μF ±10%
C779	1	75061001P0	Jumper
C780	1	DF15102350	Film 0.001μF ±5%
C781	1	DF15102350	Film 0.001μF ±5%
			P700-RESISTORS (All Resistors are ±5% and ¼W)
R701	1	GD05224140	220KΩ
R702	1	GD05224140	220KΩ
R703	1	GD05102140	1KΩ
R704	1	GD05102140	1KΩ
R705	1	GD05561140	560Ω
R706	1	GD05561140	560Ω
R707	1	GD05561140	560Ω
R708	1	GD05561140	560Ω
R709	1	GD05103140	10KΩ
R710	1	GD05103140	10KΩ
R711	1	GD05103140	10KΩ
R712	1	GD05103140	10KΩ
R713	1	GD05102140	1KΩ
R714	1	GD05102140	1KΩ
R715	1	GD05102140	1KΩ
R716	1	GD05102140	1KΩ
R717	1	GD05473140	47KΩ
R718	1	GD05473140	47KΩ
R721	1	GD05101140	100Ω
R722	1	GD05101140	100Ω
R723	1	GD05330140	33Ω
R724	1	GD05330140	33Ω
R725	1	GD05154140	150KΩ
R726	1	GD05154140	150KΩ
R727	1	GD05562140	5.6KΩ
R728	1	GD05562140	5.6KΩ
R729	1	GD05181140	180Ω
R730	1	GD05181140	180Ω
R731	1	GD05121140	120Ω
R732	1	GD05121140	120Ω

REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION
R733	1	GD05472140	4.7KΩ
R734	1	GD05472140	4.7KΩ
R735	1	GD05472140	4.7KΩ
R736	1	GD05472140	4.7KΩ
R737	1	GD05472140	4.7KΩ
R738	1	GD05472140	4.7KΩ
R739	1	GD05472140	4.7KΩ
R740	1	GD05472140	4.7KΩ
R741	1	GG05271140	270Ω
R742	1	GG05271140	270Ω
R743	1	GG05271140	270Ω
R744	1	GG05271140	270Ω
R749	1	GD05273140	27KΩ
R750	1	GD05273140	27KΩ
R751	1	GA05272010	2.7KΩ 1W
R752	1	GA05182020	1.8KΩ 2W
R753	1	GD05104140	100KΩ
R754	1	GD05104140	100KΩ
R755	1	GD05222140	2.2KΩ
R756	1	GD05222140	2.2KΩ
R757	1	GD05222140	2.2KΩ
R758	1	GD05222140	2.2KΩ
R759	1	GD05102140	1KΩ
R760	1	GD05102140	1KΩ
R761	1	GD05474140	470KΩ
R762	1	GD05474140	470KΩ
R763	1	GD05474140	470KΩ
R764	1	GD05474140	470KΩ
R771	1	GD05102140	1KΩ
R772	1	GD05102140	1KΩ
R773	1	GD05332140	3.3KΩ
R774	1	GD05332140	3.3KΩ
R775	1	GD05272140	2.7KΩ
R776	1	GD05272140	2.7KΩ
R777	1	GA05472010	4.7KΩ 1W
R779	1	GD05473140	47KΩ
R780	1	GD05473140	47KΩ
R781	1	GD05123140	12KΩ
R782	1	GD05473140	47KΩ
R783	1	GD05821140	820Ω
			P700-SEMICONDUCTORS
Q701	1	HC10021020	IC M47F(C)
Q702	1	HC10021020	IC M47F(C)
Q703	1	HT322592F0	Transistor 2SC2259(F or G)
Q704	1	HT322592F0	Transistor 2SC2259(F or G)
Q705	1	HT109952A0	Transistor 2SA995(F or G)
Q706	1	HT109952A0	Transistor 2SA995(F or G)
Q707	1	HT322402A0	Transistor 2SC2240(GR or BL)
Q708	1	HT322402A0	Transistor 2SC2240(GR or BL)
Q709	1	HT109702A0	Transistor 2SA970(GR or BL)
Q710	1	HT109702A0	Transistor 2SA970(GR or BL)
Q713	1	HT109702A0	Transistor 2SA970(GR or BL)
Q714	1	HT109702A0	Transistor 2SA970(GR or BL)
Q715	1	HT322402A0	Transistor 2SC2240(GR or BL)
Q716	1	HT322402A0	Transistor 2SC2240(GR or BL)
Q717	1	HT111242R0	Transistor 2SA1124(R or S)
Q718	1	HT111242R0	Transistor 2SA1124(R or S)
Q719	1	HT326322R0	Transistor 2SC2632(R or S)
Q720	1	HT326322R0	Transistor 2SC2632(R or S)
Q721	1	HC10019020	IC AN6552(4558)
Q722	1	HC10019020	IC AN6552(4558)

REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION
Q723	1	HD30025090	Zener WZ150
Q724	1	HD30025090	Zener WZ150
Q725	1	HD20011050	Diode 1S1555
Q726	1	HD20011050	Diode 1S1555
Q727	1	HD20011050	Diode 1S1555
Q728	1	HD20011050	Diode 1S1555
Q729	1	HD20011050	Diode 1S1555
Q730	1	HD20011050	Diode 1S1555
Q771	1	HT325902B0	Transistor 2SC2590(Q or R)
Q772	1	HT111102B0	Transistor 2SA1110(Q or R)
Q773	1	HT317752D0	Transistor 2SC1775A(D or E)
Q774	1	HT108722D0	Transistor 2SA872A(D or E)
Q775	1	HT317752D0	Transistor 2SC1775A(D or E)
Q776	1	HT108722D0	Transistor 2SA872A(D or E)
Q777	1	HD30009010	Zener HZ12B2L
			P700-PLUG
J701	1	YP01001030	Plug, (3P)
			PE01-TONE AMP. CIRCUIT BOARD (L-CH)
PE01	1	WK21441810	P.W. Board, Tone Amp. (L-ch)
			PE01-CAPACITORS
CE01	1	EA47505030	Elect 4.7μF 50V
CE03	1	DF55221090	Film 220pF ±5%
CE05	1	EA10701030	Elect 100μF 10V
CE07	1	EA10701030	Elect 100μF 10V
CE09	1	DF16472350	Film 4700pF ±10%
CE11	1	DF16472350	Film 4700pF ±10%
CE13	1	DF76560550	Film 56pF ±10%
CE15	1	EA10602530	Elect 10μF 25V
CE17	1	DF76100550	Film 10pF ±10%
CE19	1	EA10603530	Elect 10μF 35V
CE21	1	DF15563300	Film 0.056μF ±5%
CE23	1	DF15563300	Film 0.056μF ±5%
CE25	1	DF15393300	Film 0.039μF ±5%
CE27	1	DF16472350	Film 4700pF ±10%
CE29	1	EA10702530	Elect 100μF 25V
CE31	1	EA10702530	Elect 100μF 25V
CE33	1	EA47503530	Elect 4.7μF 35V
CE35	1	DF55221090	Film 220pF ±5%
CE37	1	DF76101550	Film 100pF ±10%
CE39	1	EA47601030	Elect 47μF 10V
CE41	1	DF76470550	Film 47pF ±10%
CE43	1	DF76101550	Film 100pF ±10%
CE45	1	DF76150550	Film 15pF ±10%
CE47	1	EA47503530	Elect 4.7μF 35V
			PE01-RESISTORS (All Resistors are ±5% and ¼W)
RE01	1	GD05224140	220KΩ
RE03	1	GD05331140	330Ω
RE05	1	GD05821140	820Ω
RE07	1	GD05821140	820Ω
RE09	1	GD05183140	18KΩ
RE11	1	GD05183140	18KΩ
RE13	1	GD05330140	33Ω
RE15	1	GD05330140	33Ω
RE17	1	GD05153140	15KΩ
RE19	1	GD05153140	15KΩ

REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION
RE21	1	GD05101140	100Ω
RE23	1	GD05101140	100Ω
RE25	1	GD05472140	4.7KΩ
RE27	1	GD05272140	2.7KΩ
RE29	1	GD05392140	3.9KΩ
RE31	1	GF05150140	15Ω
RE33	1	GF05150140	15Ω
RE35	1	GD05821140	820Ω
RE37	1	GD05822140	8.2KΩ
RE39	1	GD05822140	8.2KΩ
RE41	1	GD05391140	390Ω
RE43	1	GD05473140	47KΩ
RE45	1	GD05224140	220KΩ
RE47	1	GD05221140	220Ω
RE49	1	GD05471120	470Ω ½W
RE51	1	GD05471120	470Ω ½W
RE53	1	RK05030330	50KΩ(B), Variable
RE55	1	RK02030530	20KΩ(B), Variable
RE57	1	GD05684140	680KΩ
RE59	1	GD05224140	220KΩ
RE61	1	GD05331140	330Ω
RE63	1	GD05182140	1.8KΩ
RE65	1	GD05224140	220KΩ
RE67	1	GD05333140	33KΩ
RE69	1	GD05182140	1.8KΩ
RE71	1	GD05684140	680KΩ
RE73	1	GD05224140	220KΩ
			PE01-SEMICONDUCTORS
QE01	1	HT322401A0	Transistor 2SC2240(GR)
QE03	1	HT109701A0	Transistor 2SA970(GR)
QE05	1	HT108722D0	Transistor 2SA872A(D or E)
QE07	1	HT317752D0	Transistor 2SC1775A(D or E)
QE09	1	HT323201F0	Transistor 2SC2320(E or F)
QE11	1	HT406661C0	Transistor 2SD666(C)
QE13	1	HT206461C0	Transistor 2SB646(C)
QE15	1	HC10011200	IC M5213L
			PE01-PLUG
JE01	1	YP06000730	Plug, (12P)
JS01	1	YU09045210	Jumper Lead
			PE02-TONE AMP. CIRCUIT BOARD (R-CH)
PE02	1	WK21441820	P.W. Board, Tone Amp. (R-ch)
			PE02-CAPACITORS
CE02	1	EA47505030	Elect 4.7μF 50V
CE04	1	DF55221090	Film 220pF ±5%
CE06	1	EA10701030	Elect 100μF 10V
CE08	1	EA10701030	Elect 100μF 10V
CE10	1	DF16472350	Film 4700pF ±10%
CE12	1	DF16472350	Film 4700pF ±10%
CE14	1	DF76560550	Film 56pF ±10%
CE16	1	EA10602530	Elect 10μF 25V
CE18	1	DF76100550	Film 10pF ±10%
CE20	1	EA10603530	Elect 10μF 35V
CE22	1	DF15563300	Film 0.056μF ±5%
CE24	1	DF15563300	Film 0.056μF ±5%
CE26	1	DF15393300	Film 0.039μF ±5%
CE28	1	DF16472350	Film 4700pF ±10%
CE30	1	EA10702530	Elect 100μF 25V
CE32	1	EA10702530	Elect 100μF 25V
CE34	1	EA47503530	Elect 4.7μF 35V
CE36	1	DF55221090	Film 220pF ±5%
CE38	1	DF76101550	Film 100pF ±10%
CE40	1	EA47601030	Elect 47μF 10V

REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION
CE42	1	DF76470550	Film 47pF ±10%
CE44	1	DF76101550	Film 100pF ±10%
CE46	1	DF76150550	Film 15pF ±10%
CE48	1	EA47503530	Elect 4.7μF 35V
CE49	1	DF15472300	Film 4700pF ±5%
CE50	1	DF15472300	Film 4700pF ±5%
			PE02-RESISTORS (All Resistors are ±5% and ¼W)
RE02	1	GD05224140	220KΩ
RE04	1	GD05331140	330Ω
RE06	1	GD05821140	820Ω
RE08	1	GD05821140	820Ω
RE10	1	GD05183140	18KΩ
RE12	1	GD05183140	18KΩ
RE14	1	GD05330140	33Ω
RE16	1	GD05330140	33Ω
RE18	1	GD05153140	15KΩ
RE20	1	GD05153140	15KΩ
RE22	1	GD05101140	100Ω
RE24	1	GD05101140	100Ω
RE26	1	GD05472140	4.7KΩ
RE28	1	GD05272140	2.7KΩ
RE30	1	GD05392140	3.9KΩ
RE32	1	GF05150140	15Ω
RE34	1	GF05150140	15Ω
RE36	1	GD05821140	820Ω
RE38	1	GD05822140	8.2KΩ
RE40	1	GD05822140	8.2KΩ
RE42	1	GD05391140	390Ω
RE44	1	GD05473140	47KΩ
RE46	1	GD05224140	220KΩ
RE48	1	GD05221140	220Ω
RE50	1	GD05471120	470Ω ½W
RE52	1	GD05471120	470Ω ½W
RE54	1	RK05030330	50KΩ(B), Variable
RE56	1	RK02030530	20KΩ(B), Variable
RE58	1	GD05684140	680KΩ
RE60	1	GD05224140	220KΩ
RE62	1	GD05331140	330Ω
RE64	1	GD05182140	1.8KΩ
RE66	1	GD05224140	220KΩ
RE68	1	GD05333140	33KΩ
RE70	1	GD05182140	1.8KΩ
RE72	1	GD05684140	680KΩ
RE74	1	GD05224140	220KΩ
			PE02-SEMICONDUCTORS
QE02	1	HT322401A0	Transistor 2SC2240(GR)
QE04	1	HT109701A0	Transistor 2SA970(GR0
QE06	1	HT108722D0	Transistor 2SA872A(D or E)
QE08	1	HT317752D0	Transistor 2SC1775A(D or E)
QE10	1	HT323201F0	Transistor 2SC2320(E or F)
QE12	1	HT406661C0	Transistor 2SD666(C)
QE14	1	HT206461C0	Transistor 2SB646(C)
QE16	1	HC10011200	IC M5213L
			PE02-PLUG
JE02	1	YP06000730	Plug, (12P)

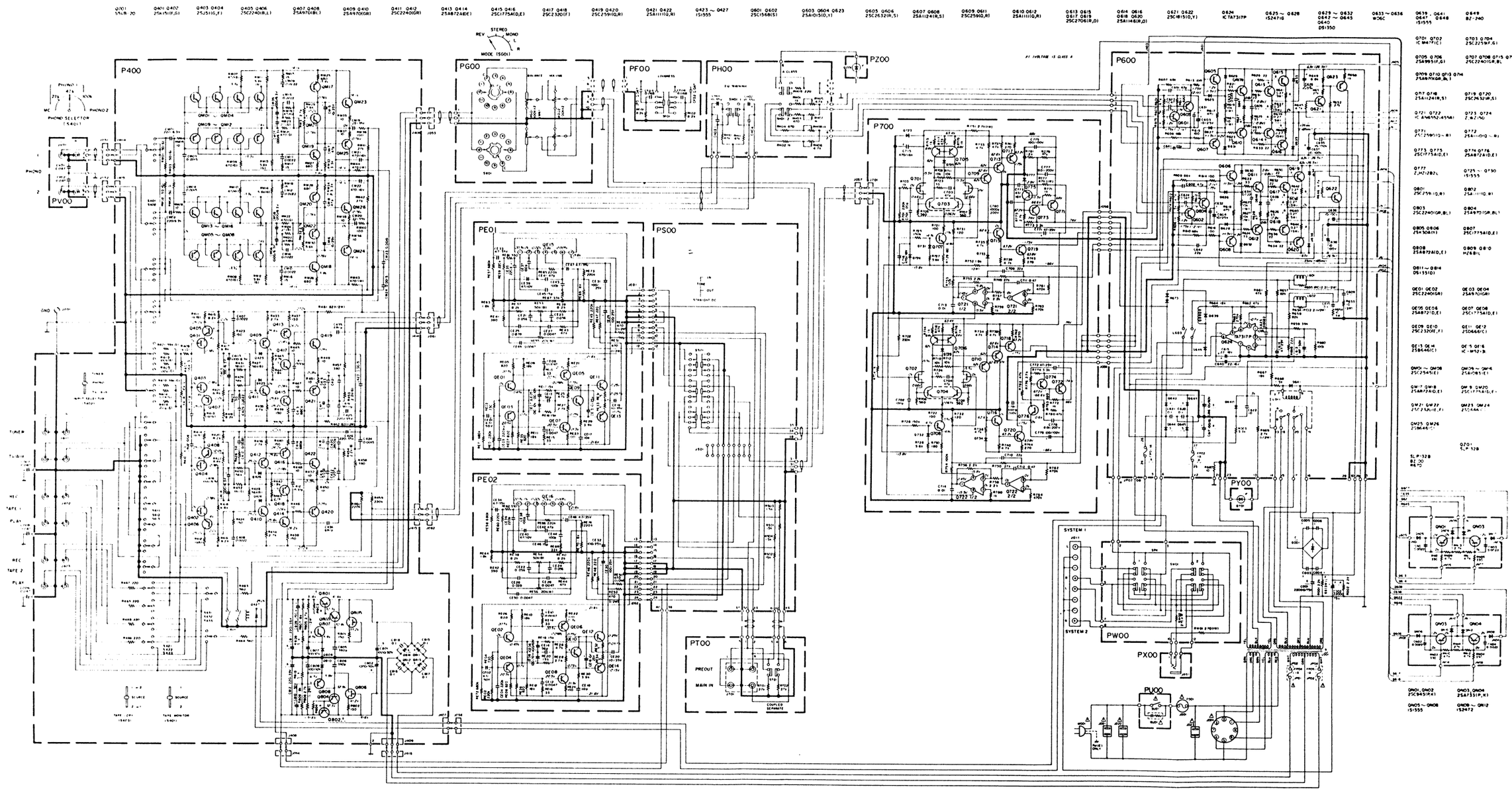
REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION
			PF00-LOUDNESS CIRCUIT BOARD
PF00	1	WK21441850	P.W. Board, Loudness
			PF00-CAPACITORS
CF01	1	DF15473300	Film 0.047μF ±5%
CF02	1	DF15473300	Film 0.047μF ±5%
CF03	1	DF15683300	Film 0.068μF ±5%
CF04	1	DF15683300	Film 0.068μF ±5%
			PF00-RESISTORS
RF01	1	GD05822140	8.2KΩ ±5% ¼W
RF02	1	GD05822140	8.2KΩ ±5% ¼W
			PF00-SWITCH
SF01	1	SC02030140	Switch, Loudness
			PG00-BALANCE CONTROL CIRCUIT BOARD
PG00	1	WH21441310	P.W. Board, Balance Control
			PG00-RESISTORS
RG01	1	RM01040300	100KΩ x 2 Variable, Balance
RG02	1	RM01040360	100KΩ x 2 Variable
			PG00-SWITCH
SG01	1	SR04050180	Rotary Switch, Mode
			PH00-FILTER CIRCUIT BOARD
PH00	1	WK21441520	P.W. Board, Filter
			PH00-CAPACITORS
CH01	1	EA10603590	Elect 10μF 35V
CH02	1	EA10603590	Elect 10μF 35V
CH03	1	DF16105510	Film 1μF ±10%
CH04	1	DF16105510	Film 1μF ±10%
			PH00-RESISTORS (All Resistors are ±5% and ¼W)
RH01	1	GD05102140	1KΩ
RH02	1	GD05102140	1KΩ
RH03	1	GD05471140	470Ω
RH04	1	GD05471140	470Ω
RH05	1	RA05020130	4.7KΩ, Trimming
RH06	1	RA05020130	4.7KΩ, Trimming
RH07	1	RA01020150	1KΩ, Trimming
RH08	1	RA01020150	1KΩ, Trimming
RH09	1	GD05221140	220Ω
RH10	1	GD05473140	47KΩ
RH11	1	GD05473140	47KΩ
RH12	1	GD05224140	220KΩ
RH13	1	GD05224140	220KΩ
			PH00-SWITCH
SH01	1	SP04020290	Push Switch
			PM01-MC TRANSISTOR BLOCK CIRCUIT BOARD
PM01	1	WH21441320	P.W. Board, MC Transistor Block
			PM01-RESISTORS
RM35	1	GF05100140	10Ω ±5% ¼W
RM36	1	GF05100140	10Ω ±5% ¼W
RM37	1	GF05100140	10Ω ±5% ¼W
RM38	1	GF05100140	10Ω ±5% ¼W

REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION
			PM01-SEMICONDUCTORS
QM01	1	HT325451E0	Transistor 2SC2545(E)
QM02	1	HT325451E0	Transistor 2SC2545(E)
QM03	1	HT325451E0	Transistor 2SC2545(E)
QM04	1	HT325451E0	Transistor 2SC2545(E)
QM05	1	HT325451E0	Transistor 2SC2545(E)
QM06	1	HT325451E0	Transistor 2SC2545(E)
QM07	1	HT325451E0	Transistor 2SC2545(E)
QM08	1	HT325451E0	Transistor 2SC2545(E)
QM09	1	HT110831E0	Transistor 2SA1083(E)
QM10	1	HT110831E0	Transistor 2SA1083(E)
QM11	1	HT110831E0	Transistor 2SA1083(E)
QM12	1	HT110831E0	Transistor 2SA1083(E)
QM13	1	HT110831E0	Transistor 2SA1083(E)
QM14	1	HT110831E0	Transistor 2SA1083(E)
QM15	1	HT110831E0	Transistor 2SA1083(E)
QM16	1	HT110831E0	Transistor 2SA1083(E)
QM17	1	HT108722D0	Transistor 2SA872A(D or E)
QM18	1	HT108722D0	Transistor 2SA872A(D or E)
QM19	1	HT317752D0	Transistor 2SC1775A(D or E)
QM20	1	HT317752D0	Transistor 2SC1775A(D or E)
QM21	1	HT323201F0	Transistor 2SC2320(E or F)
QM22	1	HT323201F0	Transistor 2SC2320(E or F)
QM23	1	HT406661C0	Transistor 2SD666(C)
QM24	1	HT406661C0	Transistor 2SD666(C)
QM25	1	HT206461C0	Transistor 2SB646(C)
QM26	1	HT206461C0	Transistor 2SB646(C)
			PM01-PLUGS
J410	1	YP06000750	Plug, (14P)
J411	1	YP06000750	Plug, (14P)
			PN00-ASO PROTECTOR CIRCUIT BOARD
PN00	1	YH22870210	P.W. Board, ASO Protector
			PN00-CAPACITORS
CN01	1	DF16222350	Film 2200pF ±10%
CN02	1	DF16222350	Film 2200pF ±10%
CN03	1	DF16222350	Film 2200pF ±10%
CN04	1	DF16222350	Film 2200pF ±10%
			PN00-RESISTORS (All Resistors are ±5% and ¼W)
RN01	1	GD05331140	330Ω
RN02	1	GD05331140	330Ω
RN03	1	GD05331140	330Ω
RN04	1	GD05331140	330Ω
RN09	1	GD05472140	4.7KΩ
RN10	1	GD05472140	4.7KΩ
RN11	1	GD05472140	4.7KΩ
RN12	1	GD05472140	4.7KΩ
RN13	1	GD05273140	27KΩ
RN14	1	GD05273140	27KΩ
			PN00-SEMICONDUCTORS
QN01	1	HT309452C0	Transistor 2SC945(P or K)
QN02	1	HT309452C0	Transistor 2SC945(P or K)
QN03	1	HT107332C0	Transistor 2SA733(P or K)
QN04	1	HT107332C0	Transistor 2SA733(P or K)
QN05	1	HD20011050	Diode 1S1555
QN06	1	HD20011050	Diode 1S1555
QN07	1	HD20011050	Diode 1S1555
QN08	1	HD20011050	Diode 1S1555
QN09	1	HD20002210	Diode 1S2472
QN10	1	HD20002210	Diode 1S2472
QN11	1	HD20002210	Diode 1S2472
QN12	1	HD20002210	Diode 1S2472

REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION
			PP00-FUSE CIRCUIT BOARD
PP00	1	WF21440010	P.W. Board, Fuse
			PP00-MISCELLANEOUS
⚠ FP01	1	FS10100090	Fuse 1A 250V
⚠ FP02	1	FS10100090	Fuse 1A 250V
⚠ FP04	1	FS10100900	Fuse 1A 250V
⚠ FP05	1	FS10100900	Fuse 1A 250V
JP01 ~ JP10	8	YJ08000170	Jack, Fuse Crip
			PS00-STRAIGHT DC CIRCUIT BOARD
PS00	1	WK21441830	P.W. Board, Straight DC
			PS00-RESISTORS
RS01	1	GD05153140	15KΩ ±5% ¼W
RS02	1	GD05153140	15KΩ ±5% ¼W
RS03	1	GD05152140	1.5KΩ ±5% ¼W
RS04	1	GD05152140	1.5KΩ ±5% ¼W
			PS00-SWITCH
SS01	1	SC06030070	Switch, Straight DC
			PT00-PRE-OUT CIRCUIT BOARD
PT00	1	WK21441840	P.W. Board, Pre-Out
RT01	1	GD05273140	Resistor 27KΩ ±5% ¼W
RT02	1	GD05273140	Resistor 27KΩ ±5% ¼W
JT01	1	YT02040320	Terminal, (4P) RCA
ST01	1	SS02020640	Slide Switch, Pre-Out
			PU00-POWER SWITCH CIRCUIT BOARD
PU00	1	WK21441550	P.W. Board, Power Switch
⚠ SU01	1	SP01010320	Push Switch, Power
⚠ GU01	1	BF10400030	Cap. Comp. 0.1μF + 120Ω
			PV00-PHONO INPUT CIRCUIT BOARD
PV00	1	WK21441860	P.W. Board, Phono Input
CV01	1	DK18473320	Ceramic Cap. 0.047μF
CV02	1	DK18473320	Ceramic Cap. 0.047μF
JV01	1	YT02040320	Terminal, (4P) RCA
			PW00-SPEAKER SWITCH CIRCUIT BOARD
PW00	1	WK21441530	P.W. Board, Speaker Switch
RW01	1	GA05271010	Resistor 270Ω ±5% 1W
RW02	1	GA05271010	Resistor 270Ω ±5% 1W
SW01	1	SP04020200	Push Switch, Speaker

REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION
			PX00-HEAD PHONE CIRCUIT BOARD
PX00	1	WK21441540	P.W. Board, Head Phone
JX01	1	YJ01001340	Jack, Head Phone
			PY00-L.E.D. POWER IND. CIRCUIT BOARD
PY00	1	WK21441880	P.W. Board, L.E.D. Power Ind.
QY01	1	HI10004030	L.E.D. SLP132B
			PZ00-L.E.D. CLASS, A IND. CIRCUIT BOARD
PZ00	1	WK21441870	P.W. Board, L.E.D. Class A Ind.
QZ01	1	HI10004030	L.E.D. SLP132B

(W01-99)	**Assembly and Wiring**
(T01-99)	**Adjustment**
(X01-00)	**Correction**



Note on safety: The parts marked with ⚠ are important parts on the safety. Please use the parts having the designated parts number without fail.

Components and wiring are subject to change for modification without notice.

⊠規格

Model Pm-6

定格出力(20Hz～20kHz両ch同時駆動)	CLASS AB	120W×2 (8Ω負荷)
	CLASS A	30W×2 (8Ω負荷)
出力帯域幅(8Ω負荷, THD0.05%)		5Hz～100kHz
全高調波歪率(20Hz～20kHz 8Ω負荷)		0.03 %以下
混変調歪率		0.015%以下
周波数特性(20Hz～20kHz)		+0, −0.2dB
(5Hz～100kHz)		+1, −1dB
ダンピングファクター(8Ω負荷)		100以上
入力感度及びインピーダンス(メインアンプ入力)		1.5V/15kΩ
フォノ 1(MM)		2.5mV/27kΩ/47kΩ/100kΩ
フォノ 1(MC)		125μV/75Ω
フォノ 2(MM)		2.5mV/47kΩ
高レベル		150mV/40kΩ
定格出力及びインピーダンス	PRE OUT	1.5V/220Ω
	TAPE OUT	150mV/250Ω
PIAA偏差(20Hz～20kHz)		±0.2dB
入力等化雑音(フォノ, IHF−A)		0.24μV
ダイナミックレンジ(フォノ)		120dB
トーンコントロール特性	(低域100Hz)	±8dB
	(高域10kHz)	±8dB

その他

電源	100V 50/60Hz
消費電力(電気用品取締法)	350W
外形寸法(幅×高さ×奥行き)	416×146×332mm
重量(セット単体)	15.5kg

仕様規格及び外観は改良のため予告なく変更することがあります。